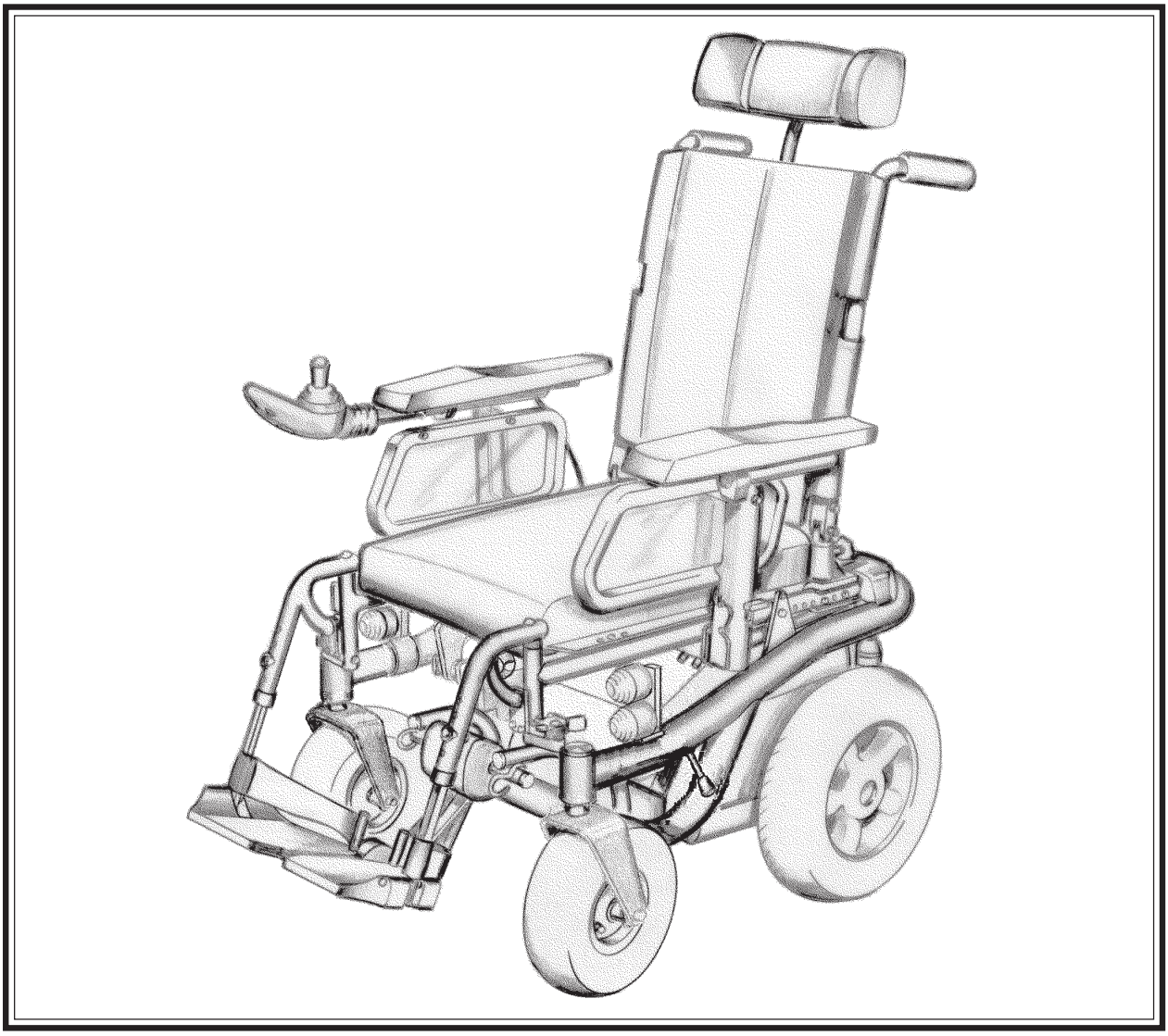
QUICKIE F55

Owner's Manual

SUNRISE MEDICAL



How to use this manual

We at Sunrise Medical want you to get the best out of your F55 wheelchair. This Owner's Manual will familiarise you with the chair and its features. It contains hints on everyday usage, and general care in addition to information on the high quality standards which we adhere to, and details about the guarantee. There are a wide range of components and adjustments available on the F55 for further information about these you should contact your wheelchair prescriber/supplier.

Your wheelchair will reach you in excellent condition, having been personally inspected before leaving our factory. By following the guidelines for maintenance and cleaning your wheelchair will maintain its first class condition, and give you complete satisfaction.

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Introduction

The F55 has been designed for use by an individual, on a daily basis. It is suitable for both indoor and outdoor use. It is only intended for use as a pavement vehicle, but may also be used when crossing between pavements.

This vehicle has been designed for a single occupant, of limited mobility, up to the weight of 127 kg (100 kg with seat lift option) who has the cognitive, physical and visual ability to control the vehicle safely. If you are in any doubt as to the suitability of the powerchair, contact your local Sunrise approved dealer for clarification, prior to commencing use.

It is very important to read the relevant section of the Owner's Manual when making any adjustments. If you have any queries about the use, maintenance or safety of your wheelchair please contact your local approved Sunrise Medical service agent. If you do not know of an approved dealer in your area or have any other questions please write to or telephone:

SUNRISE MEDICAL LIMITED
HIGH STREET, WOLLASTON, STOURBRIDGE
WEST MIDLANDS, DY8 4PS, ENGLAND
Telephone 01384 44 66 88 Fax. 01384 44 66 99
International Telephone +44 (0)1384 44 66 88 Fax.+44 (0)1384 44 66 99
www.sunrisemedical.com

Sunrise Medical is ISO 9001 certified, which ensures quality at all stages of the development, and production of this wheelchair.

CE This product is manufactured to comply with the radio interference requirements of EEC directive 89/336/EEC
Medical Device Directive 93/42/EEC

Sunrise is dedicated to providing products of exacting quality which conform fully and reliably to the requirements of their intended use.

Sunrise is accredited to B.S. EN ISO 9001, which is the internationally recognised standard for quality management systems. This approval ensures we provide quality in all areas of our business, from development through to final delivery.

SERIAL Number: **INSPECTED BY:**

Guarantee

Your guarantee

The guarantee form is included in the Sunrise Pack, please fill in the relevant details and return to us to register your entitlement.

THIS IN NO WAY AFFECTS YOUR STATUTORY RIGHTS.

Warranty conditions

1) The repair or replacement will be carried out by an authorised Sunrise Medical dealer/service agent.
2) To apply the warranty conditions should your Wheelchair require attention under these arrangements, notify the designated Sunrise Medical service agent immediately giving full information about the nature of the difficulty. Should you be operating the Wheelchair away from the locality of the designated Sunrise Medical service agent work under the “Warranty Conditions” will be carried out by any other service agent designated by the manufacturer.
3) Should any part of the Wheelchair require repair or replacement, as a result of a specific manufacturing or material defect, within twelve months from the date on which the possession of the Wheelchair was transferred to the original purchaser, and subject to it remaining within that ownership, the part or parts will be repaired or replaced completely free of charge if returned to the authorised service agent.

   Note: This guarantee is not transferable.
4) Any repaired or replaced part will benefit from these arrangements for the balance of the warranty period applicable to the Wheelchair.
5) Parts replaced after the original warranty has expired are covered for a further twelve months.
6) Items of a consumable nature will not generally be covered during the normal warranty period, unless such items have clearly suffered undue wear as a direct result of an original manufacturing defect. These items include amongst others upholstery, tyres, inner tubes, and similar parts.
7) The above warranty conditions apply to all wheelchair parts, for models purchased at full retail price.
8) Under normal circumstances, no responsibility will be accepted where the Wheelchair has required repair or replacement as a direct result of:-
   a) The Wheelchair or part not having been maintained in accordance with the manufacturer’s recommendations, where such exist. Or failing to use only the specified original equipment parts.
   b) The Wheelchair or part having been damaged by neglect, accident or improper use.
   c) The Wheelchair or part having been altered from the manufacturer’s specifications, or repairs having been attempted prior to the service agent being notified.

Please keep a note of your local service agent’s address and telephone number in the space below. In the event of a breakdown, contact them and try to give all relevant details so they can help you quickly.

The Wheelchairs shown and described in this manual may not be exactly the same in every detail as your own model. However, all instructions are still entirely relevant, irrespective of detail differences.

The manufacturer reserves the right to alter without notice any weights, measurements, or other technical data shown in this manual. All figures, measurements, and capacities shown in this manual are approximate, and do not constitute specifications.

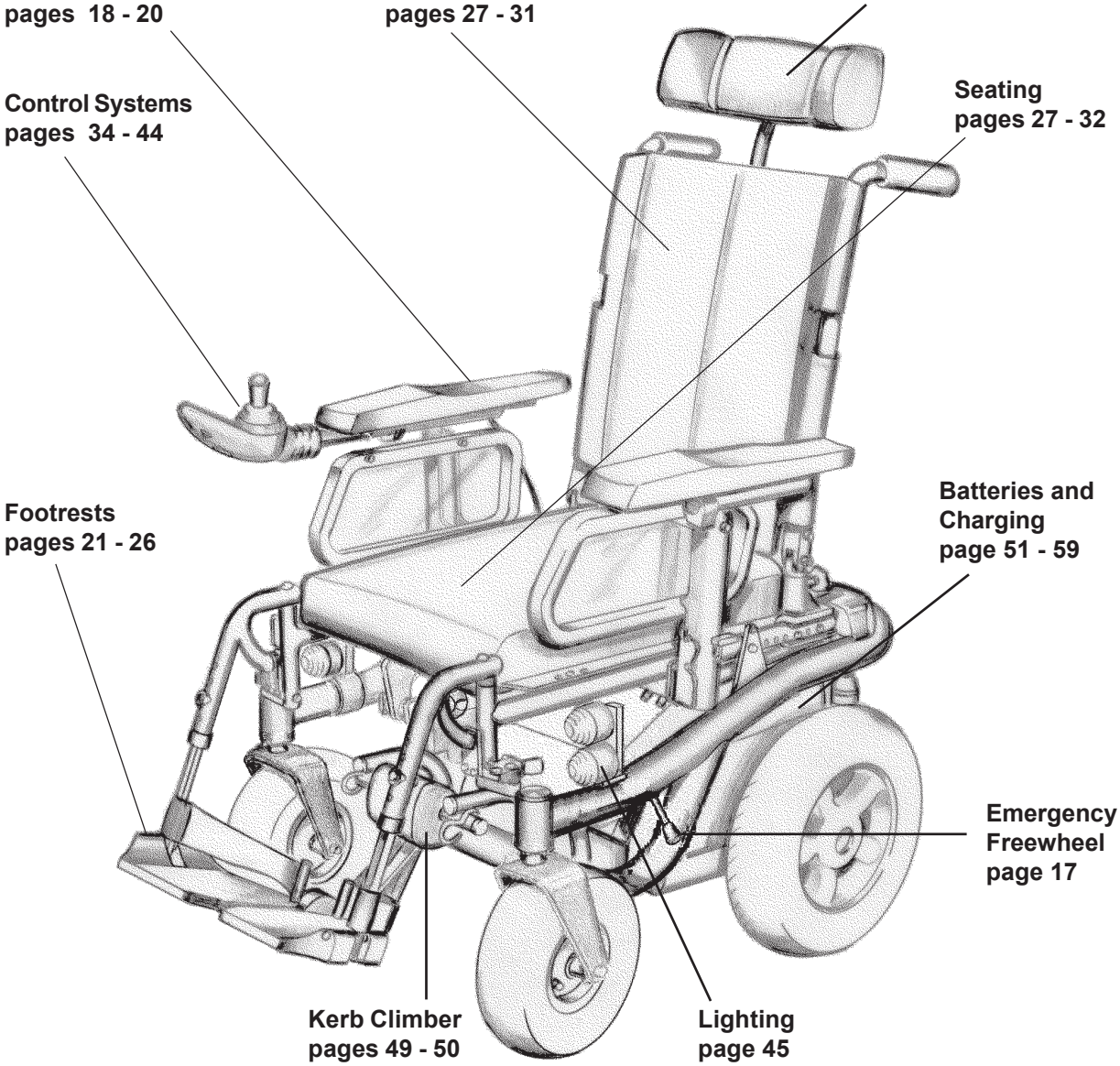
Your local dealer

Your local dealer

Sunrise Medical Limited
High Street, Wollaston, West Midlands DY8 4PS England
Tel 01384 44 66 88 Fax 01384 44 66 99
www.sunrisemedical.com

Please remember to fill in and post the guarantee registration card enclosed with this manual. **Sunrise Medical Limited** recommend that you do not undertake maintenance tasks other than those explained in this manual. Your local approved Sunrise Medical service agent is fully trained by Sunrise Medical to carry out detailed maintenance as and when required. **Use only genuine Sunrise Medical replacement parts.**

Features and options



The F55 has been designed for use by an individual, on a daily basis. It is suitable for both indoor and outdoor use. It is only intended for use as a pavement vehicle, but may also be used when crossing between pavements.

This vehicle has been designed for a single occupant, of limited mobility, up to the weight of 127 kg (100 kg with seat lift option) who has the cognitive, physical and visual ability to control the vehicle safely. If you are in any doubt as to the suitability of the powerchair, contact your local Sunrise approved dealer for clarification, prior to commencing use.

Some of the options shown in this manual may not be available in your country. For further information please consult your Sunrise supplier.

Safety warnings and user tips

Safety warnings

Safety is a very important with any vehicle that is power driven, here are some helpful tips to safeguard your use.

⚠ WARNING

The word "WARNING" refers to a hazard or unsafe practice that may cause severe injury or death to you or to other persons.

⚠ WARNING

General

Always ensure that your wheelchair is switched off before attempting to mount or dismount.

Always ensure that you are able to operate all controls from a comfortable position. Paying attention to your posture is essential to ensure your continued comfort and well being.

Always make sure that you can be seen clearly, especially if you intend using your wheelchair in poor light.

⚠ WARNING

Kerbs

Never descend a kerb forwards. Please read carefully the section on kerb climbing in this manual before attempting to mount and dismount any kerbs in your wheelchair.

Do not attempt to climb or dismount a series of steps. It is unsafe to do so and could cause personal injury or damage the chair. The F55 has only been designed to climb a single step or kerb.

⚠ WARNING

Emergency freewheel

Please remember that you have no braking facility when the freewheel lever is moved from the normal drive position to the freewheel position.

The wheelchair must never be left with the lever in the freewheel position. For a fuller description of this facility and its limitations to use please see later section.

⚠ WARNING

Emergency braking

The simplest and safest way to stop the wheelchair is to release the joystick control lever (see Control pod section). This will bring the chair to halt in a controlled manner.

Switching the control system off whilst the chair is in motion will also bring the chair to a halt. This latter method is not recommended as the stopping action is very abrupt.

⚠ WARNING

Sharp turns

Full speed turns should not be attempted. If you need to turn sharply you must reduce your speed with the joystick or speed setting. This is particularly important when travelling across or down a slope. Disregarding this advice could lead to your wheelchair tipping over.

Safety warnings and user tips

⚠ WARNING

Batteries

Your wheelchair is supplied as standard from Sunrise Medical with maintenance-free batteries. These only require regular charging.

Do not, under any circumstances, tamper with the batteries. If in any doubt contact your local service agent.

Do not connect the battery charger to the mains supply until after you have connected the charger to the wheelchair. Before charging, please read the relevant section in this manual. Take care with battery acid which is very dangerous. It can cause burns to the skin as well as damage to floors, furniture and your wheelchair. If it comes into contact with the skin or clothing, wash immediately with soap and water. If it comes into contact with the eye, immediately flood the eye with running cold water for at least 10 minutes and seek medical attention immediately. Acid can be neutralised with baking soda and water. Take care to keep batteries upright at all times, especially when transporting your wheelchair.

NOTE: Before using your vehicle for the very first time, please charge your batteries for a period of 24 hours.

⚠ WARNING

Cleaning seating

It is important that you clean all upholstery including headrest, armrests, calfpads and footplates on a regular basis using the correct methods as stated in this manual. This is important should the wheelchair be used by more than one person to ensure there is no cross infection.

⚠ WARNING

Cleaning controls

Should the control of your wheelchair become soiled or dirty, it can be wiped with a damp cloth with a dilute disinfectant until clean. This is important should the wheelchair be used by more than one person to ensure there is no cross infection.

⚠ WARNING

Cleaning paintwork

Clean with a damp, soapy cloth. Make sure that it is completely dry before using. Do not use abrasive cleaners or cloths.

⚠ WARNING

Surface temperatures

Storing the vehicle in a hot environment or in direct sunlight can cause surfaces to become hot.

⚠ WARNING

Upholstery

Please ensure ONLY genuine Sunrise Medical upholstery is fitted to your product by an authorised Sunrise Dealer

Safety warnings and user tips

⚠WARNING

Wheelchair range

The range of your wheelchair can be affected by many factors such as user weight, terrain, ambient temperature and battery condition. The stated range in the sales literature should be seen as the theoretical maximum and may not be attained by every user.

We recommend that every user initially limit their journey to half the stated range, until they have confidence in the actual range their wheelchair can attain. If your battery indicator is showing a low charge then do not attempt a long journey unless you are confident in reaching your destination and also returning to your home without the risk of being left stranded.

⚠ WARNING

Use on a slope

Your wheelchair has been designed and tested to allow its use on slopes or gradients of up to 1 in 4 (25%). However, if you have the option of adjusting the angle of seating with either tilt seat or recline back, then in certain circumstances your wheelchair could become unstable. Before attempting to climb or decline a slope, we strongly recommend that you return the seat and back to an upright position.

Failure to do this may cause the wheelchair to become unstable.

If you are in any doubt about the capabilities of wheelchair on a slope then do not attempt to drive up or down the slope, try to find an alternative route.

Mobile telephones and two - way radios

When operating cordless or mobile telephones, two way radios, walkie-talkies, C.B. Amateur Radio or other transmitting devices, the following must be noted:

⚠WARNING

Mobile telephones or two-way radios devices must not be used while operating the vehicle.

Use of mobile phones or two way radios can cause excessively strong electromagnetic fields. This may interfere with the vehicles electronic systems. If mobile phones or two way radios are required to be used, the vehicle must be brought to a halt and the power turned off before any such device is switched on or used.

⚠WARNING

Powered seat tilt and recline

Danger of injury by moving parts:
Make sure that neither you nor anyone else is injured by placing hands, feet or other body extremities under the seat whilst operating the power options.

⚠WARNING

Wheelchair motors

After prolonged use, the motors will produce heat which is radiated through the motors outer casing. Do not touch the motors outer casing for at least 30 minutes after using the wheelchair, to allow it to cool.

Safety warnings and user tips

⚠WARNING

Pneumatic Tyres

Always maintain the correct pressure for the tyre. These are listed in the maintenance section of this manual.

Always use the pump that is supplied with the chair.

Never use a forecourt pump.

Inspect all tyres regularly for signs of wear.

Do not drive over anything that could cause punctures in the tyres.

Ensure that there are no objects in your path that could possibly become lodged in your chair mechanism or in the spokes of the rear wheels. This could cause the chair to come to a sudden stop.

Riding over drains or grids could cause the wheelchair castors or wheels to become lodged, causing the chair to come to a sudden stop.

⚠ WARNING

Solid Tyres

Inspect all tyres regularly for signs of wear.

Ensure that there are no objects in your path that could possibly become lodged in your chair mechanism or in the spokes of the rear wheels. This could cause the chair to come to a sudden stop.

Riding over drains or grids could cause the wheelchair castors or wheels to become lodged, causing the chair to come to a sudden stop.

⚠ WARNING

Pneumatic Tyres with OKO fluid

Always maintain the correct pressure for the tyre. These are listed in the maintenance section of this manual.

Always use the pump that is supplied with the chair.

Never use a forecourt pump.

Inspect all tyres regularly for signs of wear.

Do not drive over anything that could cause punctures in the tyres.

Ensure that there are no objects in your path that could possibly become lodged in your chair mechanism or in the spokes of the rear wheels. This could cause the chair to come to a sudden stop.

Riding over drains or grids could cause the wheelchair castors or wheels to become lodged, causing the chair to come to a sudden stop.

The OKO fluid is only meant as a temporary repair to the tyre. It must be replaced or repaired as soon as possible.

The OKO fluid is classified as non hazardous but may cause irritation to the skin with prolonged contact.

First Aid measures for OKO fluid
Skin - Wash skin with plenty of water
Eyes - Immediately flood the eye with plenty of water for at least 5 minutes holding the eye open.
Ingestion - Drint lots of water - Seek medical attention immediately.

Safety warnings and user tips

⚠WARNING

Fasteners

- Many of the screws and bolts on this chair are special high-strength fasteners and may have special coatings.
- Many nuts are of the Nyloc type. Nylocs are single use fasteners and must be replaced when removed. They have a plastic insert to help prevent loosening.
- Only use screws, bolts and nuts provided by Sunrise.

1. Use of improper fasteners may cause the chair to fail.
2. Over or under-tightened fasteners may fail or cause damage to chair parts.
3. If bolts or screws become loose, tighten them as soon as you can. Loose bolts or screws can cause damage to other chair parts causing them to fail.

Washers and Spacers

- Note the position of washers and spacers before disassembly.
- To avoid damage to the frame, replace all washers and spacers when you reassemble parts.

Torque Settings

- A torque setting is the optimal tightening for a particular fastener. Use a torque wrench to secure screws, nuts and bolts on this chair.

NOTE: Unless otherwise noted, use a torque setting of 13.5Nm for all fasteners.

⚠ WARNING

Speciality Controls

- Any specialist controls may have a detrimental effect on stability. We strongly recommend you apply caution when negotiating slopes and inclines.

⚠ WARNING

User injury could occur when allowing 3rd party individuals to gain access to the control system.

⚠WARNING

Speciality control programming must only be preformed by an Authorised Sunrise Dealer.

⚠WARNING

Be aware that latch drive can be dangerous when using speciality controls, please review the manual that comes with your product for correct use.

Safety warnings and user tips

⚠WARNING

Environmental

Use extra care if you must ride your chair on a wet or slick surface. If in doubt ask for help.

Contact with water or excess moisture may cause your chair to rust or corrode. This could cause your chair to fail.

Do not use your chair in a shower, pool or other body of water. The chair tubing and other parts are not water tight and may rust or corrode from the inside.

Avoid excess moisture (e.g. do not leave your chair in a damp bathroom while taking a shower).

Dry your chair as soon as possible if it gets wet, or if you use water to clean it.

Don't store your chair in direct sunlight.

⚠WARNING

Weight Limit

1. The user plus items carried should never exceed a total weight of 127kg (100kg for seat riser).
2. Never use this chair for weight training if the total weight (user plus additional weights) exceeds 127kg (100kg for seat riser).
3. Exceeding the weight limit is likely to damage the seat, frame or fasteners, and may cause severe injury to you or others from chair failure.
4. Exceeding the weight limit will void the warranty.

⚠WARNING

Terrain

Your chair is designed for use on firm, even surfaces such as concrete, asphalt and indoor floors and carpeting.

Do not operate your chair in sand, loose soil or over rough terrain. This may damage wheels or axles, loosen fasteners or could make your chair unstable.

Be aware of your terrain and look ahead for any possible hazards.

Riding over drains or grids could cause the wheelchair castors or wheels to become lodged, causing the chair to come to a sudden stop.

Ensure that there are no objects in your path that could possibly become lodged in your chair mechanism or in the spokes of the rear wheels. This could cause the chair to come to a sudden stop.

Do not ride over anything that could cause a puncture in the pneumatic wheels or castors

Routine service

Like most things in life a little care and attention goes a long way and your chair is no exception. The recommended service interval is one year.

(See service history on later page).

Safety warnings and user tips

⚠WARNING

Road Use

Please show the utmost consideration for the other traffic on the road.

Remember that the last thing a car or lorry driver expects to see is a wheel chair backing off the kerb into the road. If in any doubt, do not risk crossing the road until you are certain that it is safe.

Always cross the road as quickly as possible; there may be other traffic.

⚠WARNING

Adverse conditions

Please be aware that when driving your wheelchair in adverse conditions, e.g. on wet grass, mud, ice, snow, or other slippery surfaces, you may experience a reduction in the grip and traction of your wheelchair. We recommend you take extra precautions in these conditions, particularly on hills and slopes, your wheelchair could become unstable or skid causing possible injury. Extreme variances in temperature may trigger the self protect mechanism in the control system. If this occurs the control system will temporarily shut down to prevent damage to the electronics or the chair.

⚠WARNING

Ramps

When using a ramp, please ensure that is capable of taking the combined weight of the powerchair and yourself. If a ramp is being used to load a chair into a vehicle, please ensure the ramp is properly secured to the vehicle. Always approach the ramp head-on and exercise caution (Fig. A).

⚠ WARNING

Never drive on ramps with the seat tilted, reclined or raised if fitted with a seat riser. Before attempting to climb or decline a slope, always return the chair to an upright position.

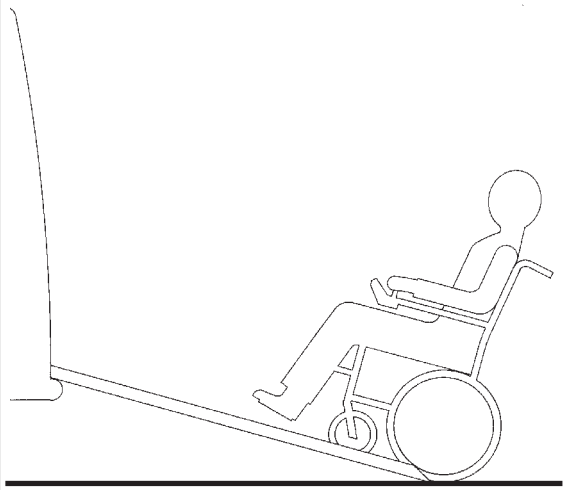


Fig. A

Safety warnings and user tips

⚠WARNING

Passenger lifts

Wheelchair lifts are used in vans, buses and buildings to help you move from one level to another.

Ensure that the user and all carers fully understand the lift manufacturers instructions for using the passenger lift.

Never exceed the lift manufacturers recommended safe working load and load distribution guidance.

Always turn off all power when you are on the lift. If you fail to do so, you may touch the joystick by accident and cause your chair to drive off the platform. Be aware that a rollstop at the end of the platform may not prevent this.

Always position the user securely in the chair to help avoid falls while on the lift.

⚠WARNINGS

Be sure to keep all parts of the chair away from naked flames and sources of extreme heat.

Further information

For further information on:

DB2004(02) Stability of wheelchairs.

DB2003(03) Safe use of wheelchairs and vehicle-mounted passenger lifts.

DB2001(03) Safe transportation of wheelchairs.

Go to the MHRA website at:

http://www.mhra.gov.uk

Safety information on wheelchairs with a riser

⚠WARNING

Danger of injury if the wheelchair tips over

1. Never exceed the maximum permissible load (100 kg).
2. Avoid dangerous driving situations when the riser is in a raised position, such as trying to overcome obstacles like kerbs or driving up or down gradients.
3. Never lean out of the seat when the riser is raised.
4. Inspect the riser module at least once a month to make sure the automatic speed reduction, which reduces the speed of the wheelchair when the riser is raised, is working properly. Notify your authorised dealership immediately if it is not working properly.
5. Do not drive the wheelchair outdoors when in the raised position.

⚠WARNING

Danger of injury by moving parts

1. Never let the objects get caught in the space underneath a raised riser.
2. Make sure that neither you or anyone else is injured by placing hands, feet or other body extremities under the raised seat.

⚠WARNING

Danger of malfunction of the Riser Module

1. Inspect the riser at regular intervals to make sure there are no foreign objects or visible damage and to make sure the electronic plugs are firmly inserted into their sockets.

Preparing your wheelchair for use

Armrests

The armrests on both sides of the wheelchair can be removed to allow side transfer. Press the spring loaded catch mounted on the side of the armrest frame down tube (Fig.1) and remove armrest as shown. When seated, lower the armrest until it locks into the retaining bracket. For full details see pages 18 & 19.

⚠WARNING

Keep your fingers and clothing etc clear of the inside of the retaining bracket until the armrest is locked in place.

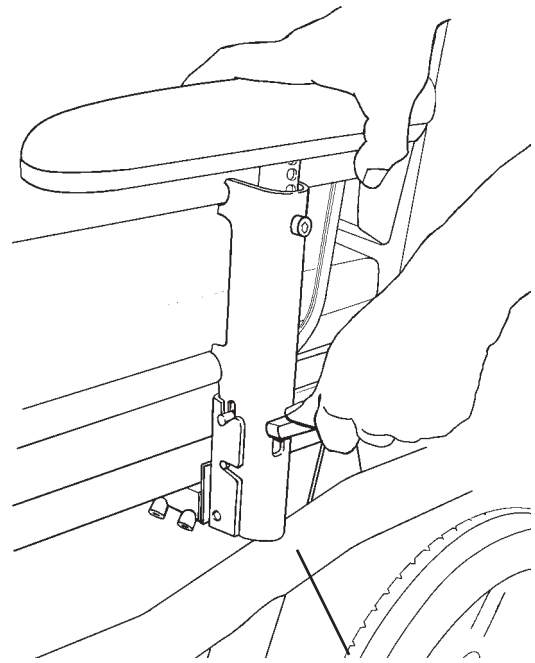


Fig. 1

Control pod

The control pod is mounted on a sliding mechanism, which enables the control to be moved forward or backwards (Fig. 2). When the most comfortable position has been selected, secure the slider by tightening the locking Allen screw, using an Allen key.

⚠WARNING

Ensure the locking screw is fully tightened prior to use and especially when transporting your wheelchair.

The pod can also be swung away at right angles to the armrest to allow the chair to move close to tables.

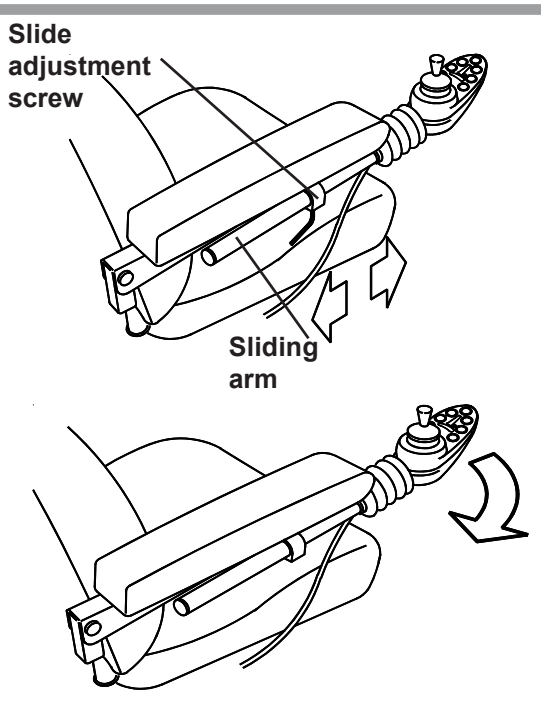


Fig. 2

⚠WARNING

Trapping hazard could occur when moving swing-away arm, please take care.

Preparing your wheelchair for use

Power lead attachment

The power lead must also be plugged into the socket as shown in Fig. 3.

⚠WARNING

When unplugging the power lead pull off by gripping the outer plastic cover. Never pull the cable to disconnect the plug.

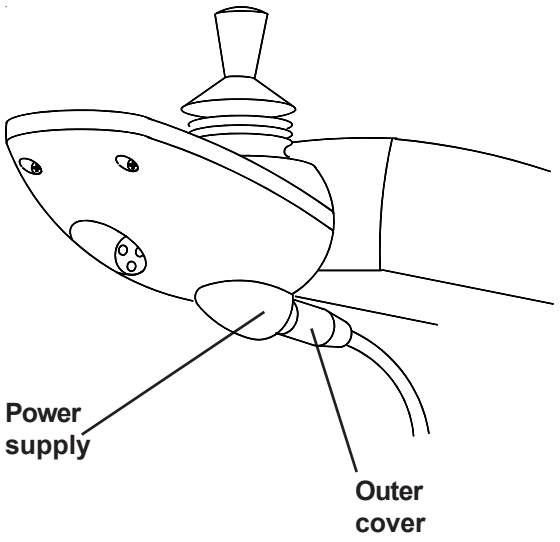


Fig. 3

Attaching the rear view mirror

1. Firstly set the Pilot Plus remote pod arm into the desired position.
2. Place the metal clamp over the remote arm, between the adjust bracket and the rubber gaiter of the Pilot Plus swing-away. The holes must be toward the outside of the chair.
3. Place the mirror through the clamp holes and then, using the locking handle, begin to tighten the mirror in position.
4. The mirror should stand vertically once in position but can be subsequently adjusted by slackening off the locking handle, adjusting the mirror and then re-tightening - See Fig. 4.

Always make sure that when using the mirror that it is clean and unbroken so that it does not impair your visibility.

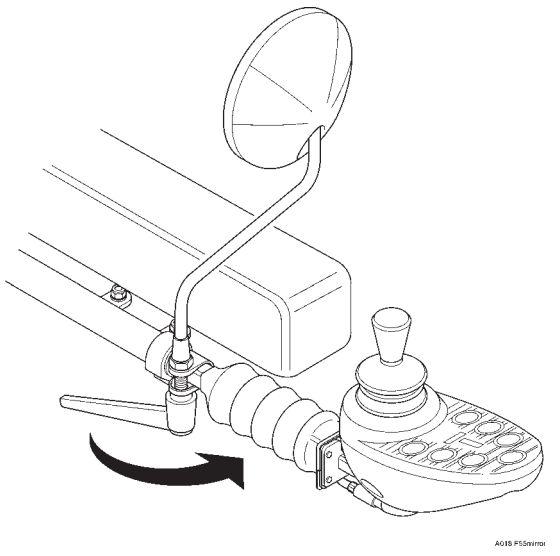


Fig. 4

⚠WARNING

To avoid injury to people around you please be aware that the mirror protudes outside the space envelope of the chair and could cause injury to someone when driving past.

The mirror must be used on the 10KPH model on UK roads.

Preparing your wheelchair for use

Fitting footrests

Firstly, offer the footrest assembly at right angles to the frame (Fig. 5), locate the stem into the frame tube and swing assembly forward as shown in Fig. 6 to lock in position. To swing away the footrest, simply depress the retaining catch and turn the footrest out. This can now be lifted out if required.

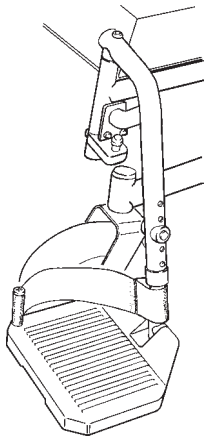


Fig. 5

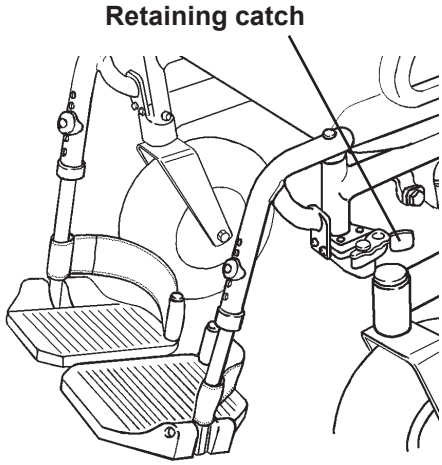


Fig. 6

Seat back fitting and removal

The seat back is fitted by sliding the two mounting tubes into the two receivers as shown in Fig. 7.
Once in place the two locking knobs must be firmly tightened to secure the backrest. To remove the backrest simply reverse the fitting procedure.

NOTE

Please note this does not apply to Recaro Seat option.

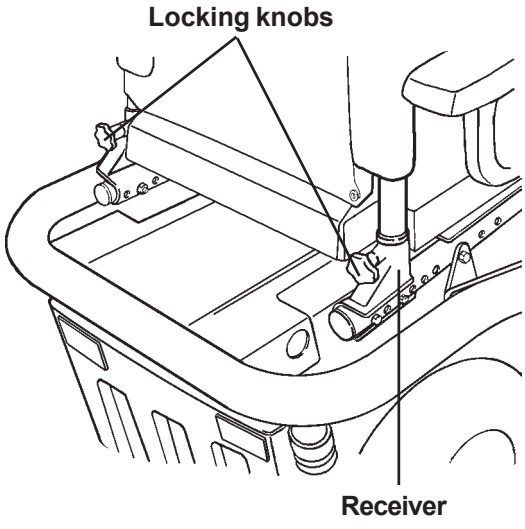


Fig. 7

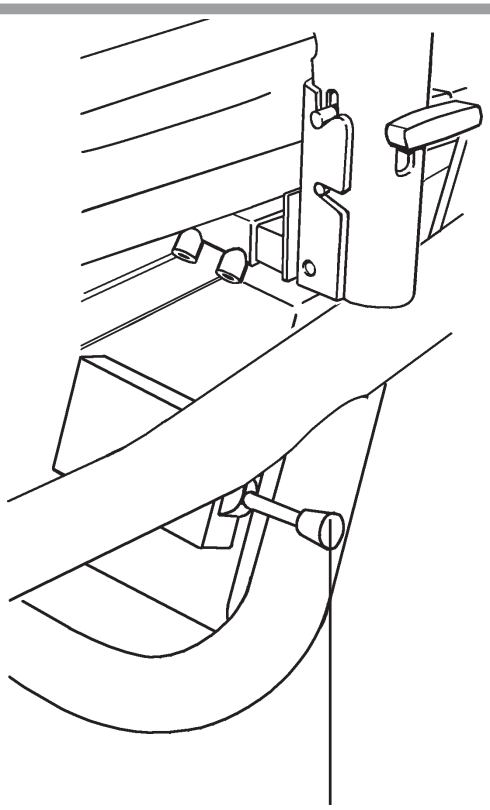
Emergency freewheel

By pulling the drive lever up, the drive becomes disconnected from the motors. This may only be used in an emergency, or if you need to manually push your wheelchair (Fig. 8).

⚠WARNING

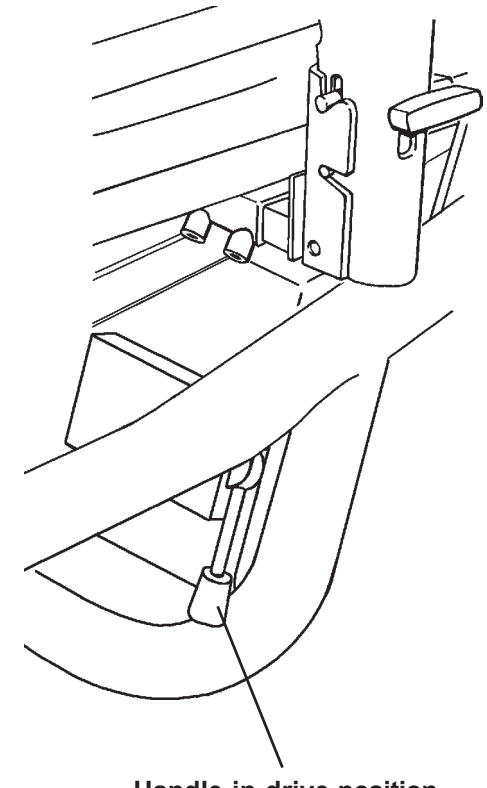
Freewheel is not intended for permanent use.
REMEMBER:
The chairs automatic braking system will not work unless the handle on the right hand side of the chair is pushed down (Fig. 9).
ALWAYS RE-ENGAGE THE EMERGENCY FREEWHEEL AFTER USE.

If you need to manually push your wheelchair, pull the handle up, move the chair, and then return the handle to the drive position. Never leave the chair with the drive lever up, or attempt to enter or dismount the chair with the lever in the up position.
Remember that the wheelchair is very heavy and you may not be able to stop the wheelchair from rolling away if you engage the freewheel on sloping ground.



Handle in freewheel position

Fig. 8



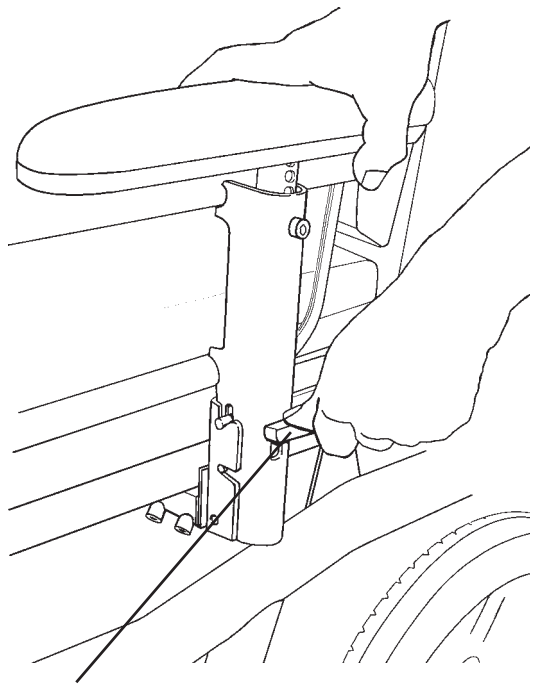
Handle in drive position

Fig. 9

Armrests

Removing

To remove the armrest press the unlocking lever down (Fig. 10) and push the armrest outwards, as shown in Fig. 11A. At all times please ensure you hold the armrest to avoid it falling on the floor.



Armrest unlocking lever

Fig 10

Replacing armrests

To replace the armrests, locate the slots over the location pivot, as shown in Fig. 11A, and push the armrest to a vertical position until you feel it lock automatically into place (Fig. 11B). Prior to use ensure the armrest is securely locked in place.

⚠WARNING

Keep fingers and clothing etc clear of the inside of the retaining bracket until armrest is locked in place.

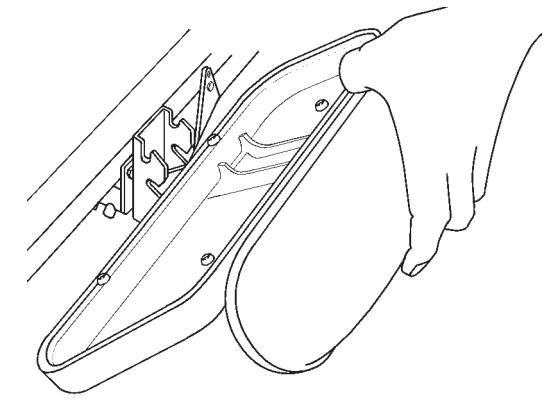


Fig. 11A

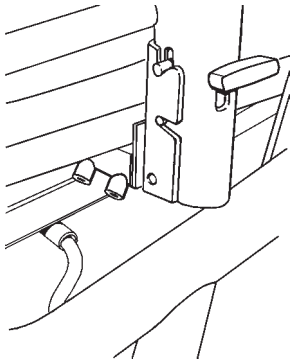
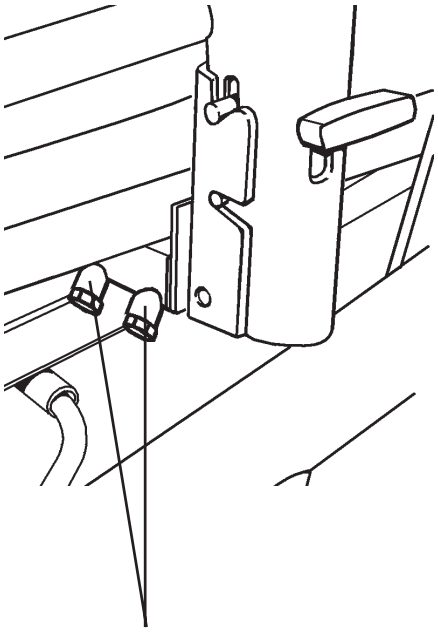


Fig. 11B

Armrests

Adjusting the armrest width

To adjust the width, loosen the two bolts as shown in Fig. 12, move the armrest assembly to the desired position and tighten the bolts firmly prior to use.

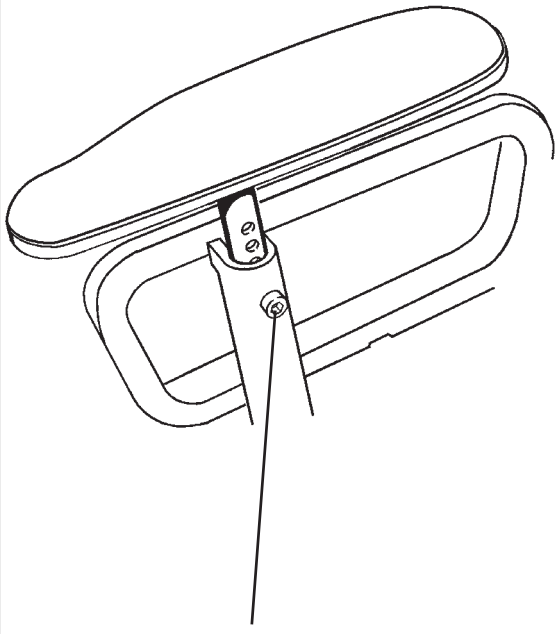


Adjustment bolts

Fig. 12

Adjusting the armrest height

To adjust the height, loosen the adjusting Allen screw, move the armrest to the desired position and tighten the Allen screw (Fig. 13).



Armrest height adjustment Allen screw

Fig. 13

Armrests

Cleaning instructions for the Contour Pad

Clean regularly to prevent build up or soiling.
Clean with a damp soapy cloth and rinse well with clean water. Dry the surface thoroughly.
Disinfectants may be used in dilution as specified by their manufacturer. Ensure surfaces are then rinsed with clean water and dried thoroughly.

Cleaning instructions for the Comfort Pad

Clean regularly to prevent build up or soiling.
Clean with a damp soapy cloth and rinse well with clean water. Dry the surface thoroughly.
A soft brush with soapy water may be used to remove stubborn dirt. Ensure surfaces are then rinsed and dried.
Some chemical colourings, e.g. ball point pen, food colourings or clothes dyes should be removed immediately to prevent long term staining.
Do not use solvents, bleaches, abrasives, synthetic detergents, wax polishes or aerosols.
Disinfectants may be used in dilution as specified by their manufacturer. Ensure surfaces are then rinsed with clean water and dried thoroughly.

⚠ WARNINGS

Do not try to move the chair by the armrests.

Ensure that the armrests are correctly fitted and locked in place.

Keep your fingers and clothing etc clear of the inside of the retaining bracket until the armrest is locked in place.

⚠ WARNING

Keep armrest away from any heat sources and naked flames.

Footrests

Removing

The footrest assembly can be removed by pulling the release lever backwards, and swinging the footrest outwards and upwards (Fig. 14).

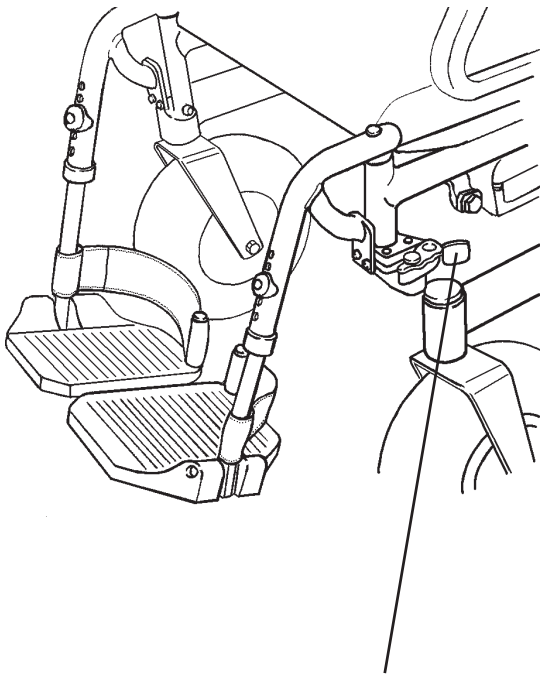


Fig. 14 **Release lever**

Refitting

To re-fit the footrest, insert the top into the vertical tube and swing inwards until the release lever locks into place (Fig. 15).

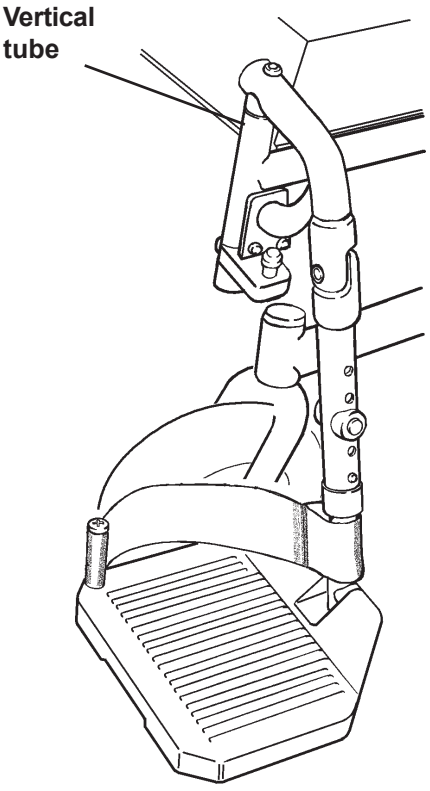


Fig. 15

Footrests

Adjusting the footrest length

To adjust the footrest length, remove the screw assembly on the footrest stem as shown in Fig. 16, adjust the length to suit. Replace the bolt assembly and tighten. Ensure the bolt is firmly located and tightened prior to use.

Note: The internal footrest stem may require cutting down in length to allow the footplate position to be raised (Fig. 16). This modification must only be undertaken by an approved Sunrise Medical service agent.

Screw assembly

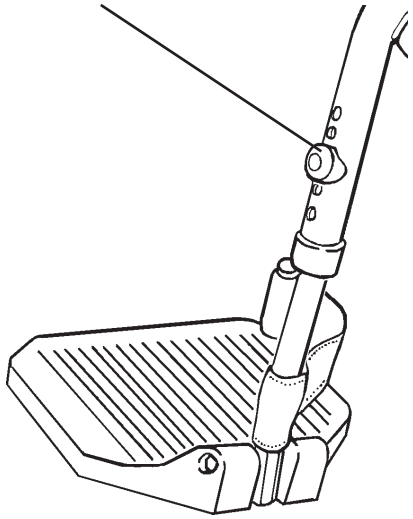


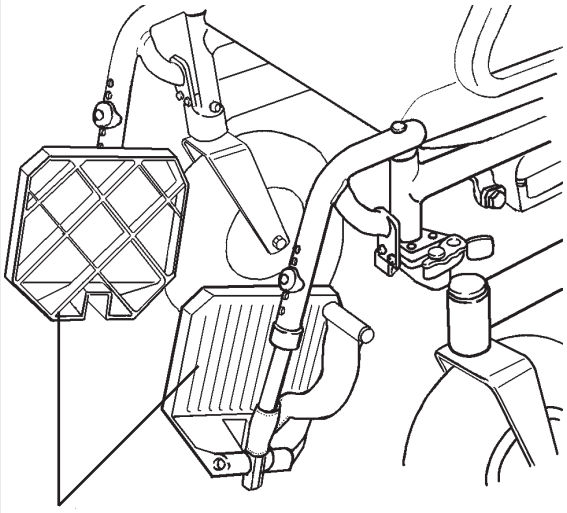
Fig. 16

Footplates

The footplates may be flipped up to aid entry and exit from the chair (Fig. 17).

⚠ WARNING

Do not use the footplates to stand on, as the full weight of your body may cause the chair to tip forwards, and could damage the footrests.



Footplates in up position

Fig. 17

70° Legrest

Fitting

Follow the instructions for the fitting and removal of legrests as stated on page 21 and the adjustment of the footplates as stated on page 22. See Fig. 18 and 19 below.

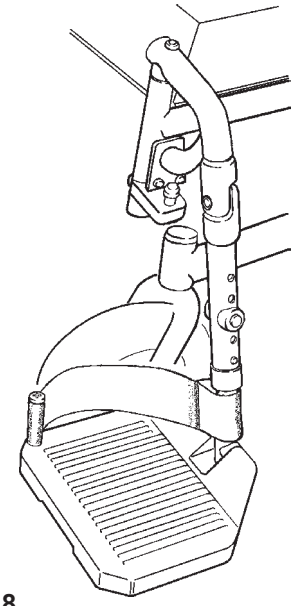


Fig. 18

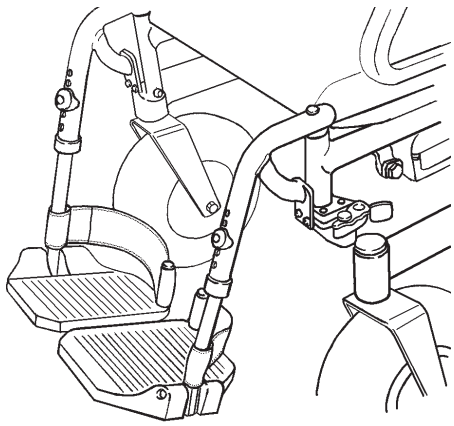


Fig. 19

⚠ WARNING

With the leg in an elevated position it is more likely that the user could injure the leg on obstacles in the environment. Make sure that you are aware of your terrain and be cautious when driving the chair that your leg cannot impact on anything around you.

Do not drive your chair too close to any source of open flame. With your leg in an elevated position you may not know that the bottom of the footplate is getting hot.

Inspect the legrest, footplate and heel loop regularly for signs of damage or wear. Damage to the legrest could result in the users leg being dropped and could cause injury.

Cleaning Instructions

Footrest - Clean with a damp soapy cloth.

Paintwork - Clean with a damp soapy cloth. Do not use abrasive cleaners or cloths.

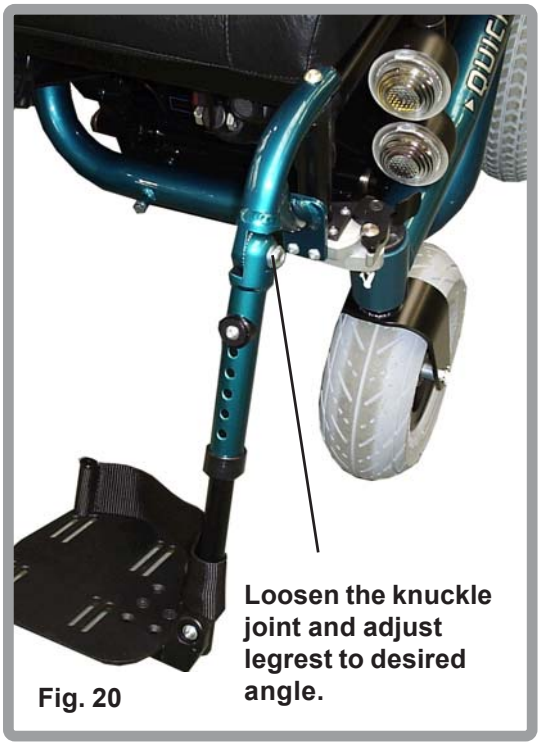
Make sure that the legrest is completely dry before using.

Angle Adjustable Legrest

Fitting

Follow the instructions for the fitting and removal of footrests as stated on page 21 and the adjustment of the footplates as stated on page 22.

To adjust the angle of the legrest undo the knuckle screw & move legrest to desired position, once in the position re-tighten the screw, see Fig. 20 below.



Loosen the knuckle joint and adjust legrest to desired angle.

Fig. 20

Cleaning Instructions

Footrest - Clean with a damp, soapy cloth.

Paintwork - Clean with a damp, soapy cloth. Do not use abrasive cleaners or cloths.

Make sure that the legrest is completely dry before using.

⚠ WARNING

The use of an angle adjustable legrest can affect the stability of the chair. Be especially careful when riding up or down slopes.

With the leg in an elevated position it is more likely that the user could injure the leg on obstacles in the environment. Make sure that you are aware of your terrain and be cautious when driving the chair that your leg cannot impact on anything around you.

Do not drive your chair too close to any source of open flame. With your leg in an elevated position you may not know that the bottom of the footplate is getting hot.

Do not hang items from the legrest, or allow anyone to stand on the legrest with it in the elevated or non-elevated position. This could cause injury to them, to you or could cause damage to the chair.

Inspect the legrest, footplate and heel loop regularly for signs of damage or wear. Damage to the legrest could result in the users leg being dropped and could cause injury.

Manual Articulating Legrest (ALR)

Fitting

Follow the instructions for the fitting and removal of footrests as stated on page 21and the adjustment of the footplates as stated on page 22. see Fig. 21 and 22 below.

Fig. 21

To adjust ALR press adjustment lever to release lock and move footrest into desired position

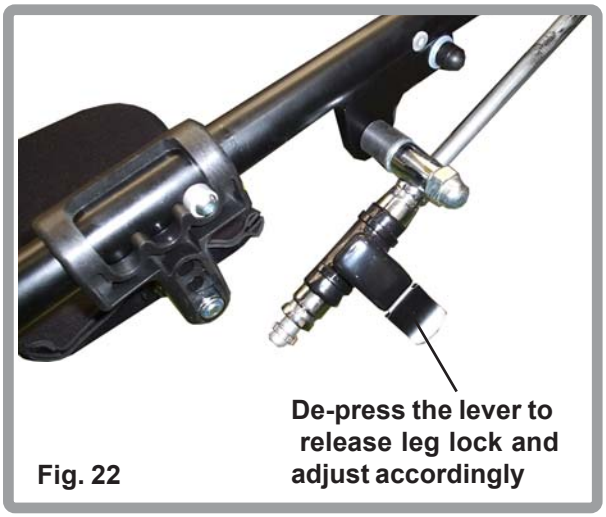


Fig. 22

Cleaning Instructions

Footrest and calfpad - Clean with a damp soapy cloth.
Paintwork - Clean with a damp, soapy cloth.
Make sure that the legrest is completely dry before using.

⚠ WARNING

The use of an ALR can affect the stability of the chair. Be especially careful when riding up or down slopes.

Depending on the flexibility and strength of the user, it may not be possible for them to adjust the height of the manual ALR by themselves. This may need to be carried out by attendant.

With the leg in an elevated position it is more likely that the user could injure the leg on obstacles in the environment. Make sure that you are aware of your terrain and be cautious when driving the chair that your leg cannot impact on anything around you.

Do not drive your chair too close to any source of open flame. With your leg in an elevated position you may not know that the bottom of the footplate is getting hot.

Do not hang items from the legrest, or allow anyone to stand on the legrest with it in the elevated or non-elevated position. This could cause injury to them, to you or could cause damage to the chair.

Inspect the legrest, footplate, calfpad and heel loop regularly for signs of damage or wear. Damage to the legrest could result in the users leg being dropped and could cause injury.

Power Articulating Legrest (ALR)

Fitting

Follow the instructions for the fitting and removal of footrests as stated on page 20.

For the adjustment of the leg angle press the mode button on the controller until the chair option is illuminated. Move the control lever to the left or right until the footrest option is illuminated. Move the joystick up or down to adjust the legrest until in a suitable position.

In addition to the footrest fitting instructions please ensure that the power lead shown in fig is removed and refitted along with the ALR - see fig 23 below.

Fig. 23

Cleaning Instructions

Footrest and calfpad - Clean with a damp soapy cloth.
Paintwork - Clean with a damp, soapy cloth.
Make sure that the legrest is completely dry before using.

⚠ WARNING

The use of an ALR can affect the stability of the chair. Be especially careful when riding up or down slopes.

With the leg in an elevated position it is more likely that you could injure the leg on obstacles in the environment. Make sure that you are aware of your terrain and be cautious when driving the chair that your leg cannot impact on anything around you.

Do not drive your chair too close to any source of open flame. With your leg in an elevated position you may not know that the bottom of the footplate is getting hot.

Do not hang items from the legrest, or allow anyone to stand on the legrest with it in the elevated or non-elevated position. This could cause injury to them, to you or could cause damage to the chair.

Make sure that the Power lead to the ALR's are free of all mechanisms to ensure that it does not get trapped and can be pulled out. If this happens the ALR will stop operating and you may be trapped in the chair

Inspect the legrest, footplate, calfpad and heel loop regularly for signs of damage or wear. Damage to the legrest could result in the users leg being dropped and could cause injury.

Backrest removal and refitting

Although there are a variety of backrests which can be used on the F55 chair, they all attach and release in the same way.
Remove the seat cushion, to free the Velcro® strips on the backrest flap (Fig. 24).
Loosen the two knobs as shown in (Fig. 24A), and pull the backrest up to disengage it from its mounting.
To replace reverse the process, ensuring that the backrest is correctly located, and that the locking knobs are firmly tightened.

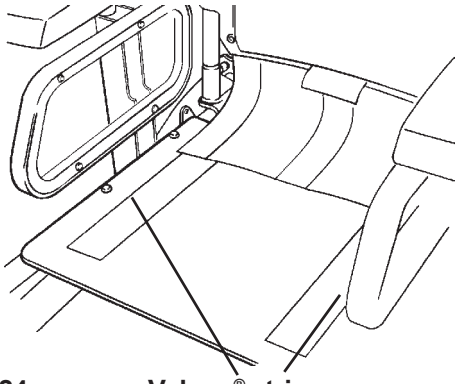


Fig. 24

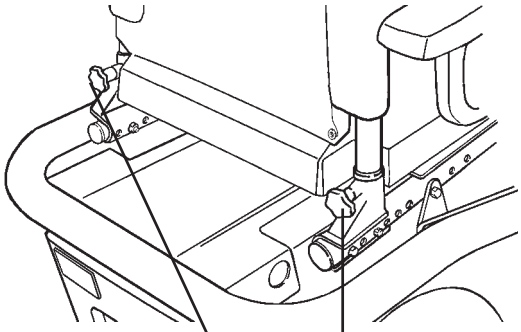


Fig. 24A

NOTE

Please note this does not apply to the Recaro Seat option.

Seat depth adjustment

The seat depth is adjusted by removing the 4 screws and nuts, (2 each side) and sliding the backrest into the appropriate position. Once in the desired position, the screws are replaced, remembering to securely tighten the nuts (Fig. 25). When the seat riser option is fitted, the seat depth is adjusted by moving the padded back forward or backward with the brackets which slide along the backrest tubes. The adjustments must be carried out only by an approved Sunrise Medical service agent.

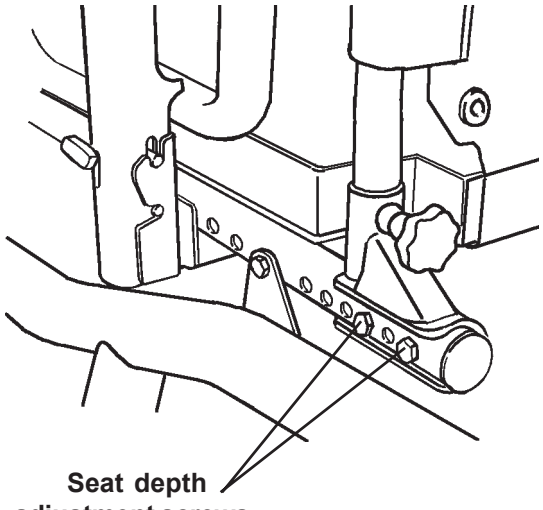


Fig. 25

Manual seat tilt adjustment

To adjust the seat tilt, remove the nut and bolt, slide the seat to the desired position, replace the nut and bolt and tighten (Fig. 26).
The seat can be tilted through any angle from 0° to 20° (Fig. 27). When the seat riser option is fitted, the maximum adjustable tilt is limited to 10° for safety reasons.

⚠ WARNING

Before adjusting the seat tilt angle, you must understand that this may adversely affect the stability of the wheelchair when kerb climbing or on slopes. It is strongly recommended that you consult your local Sunrise Medical dealer prior to making adjustments.

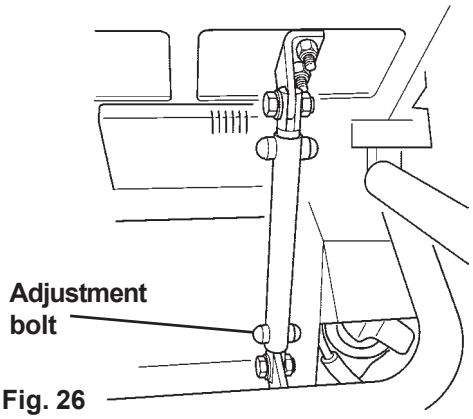


Fig. 26

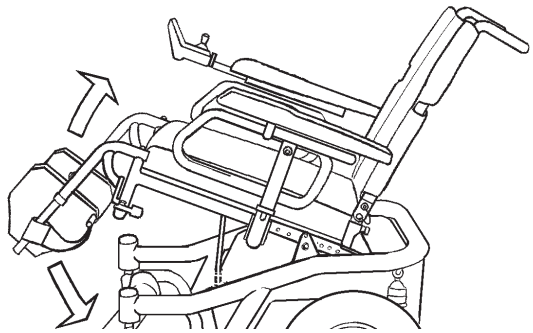


Fig. 27

Powered adjustment (optional)

The following functions of the powered backrest are operated by the Control Pod (pages 34 - 30).

Backrest angle

The backrest can be adjusted from 0° through to 40° (Fig. 28).

If the seat lift option is chosen the powered backrest angle is limited to a maximum of 30° for safety reasons. If the seat lift option is operated, the powered backrest will come automatically to an upright position.

Seat tilt angle

The seat can be tilted through any angle from 0° to 20° (Fig. 29).

If the seat lift option is chosen the seat tilt angle is limited to a maximum of 10° for safety reasons.

⚠ WARNING

Power backrest and seat tilt functions are provided to enable you to vary your resting position. Before driving the chair, the seat pan angle must be returned to within 8° of horizontal, and the backrest to within 8° of vertical.

Failure to return the seat to the drive position could lead to the chair becoming unstable.

Never use power seating functions when the chair is on a slope.

Fig. 28

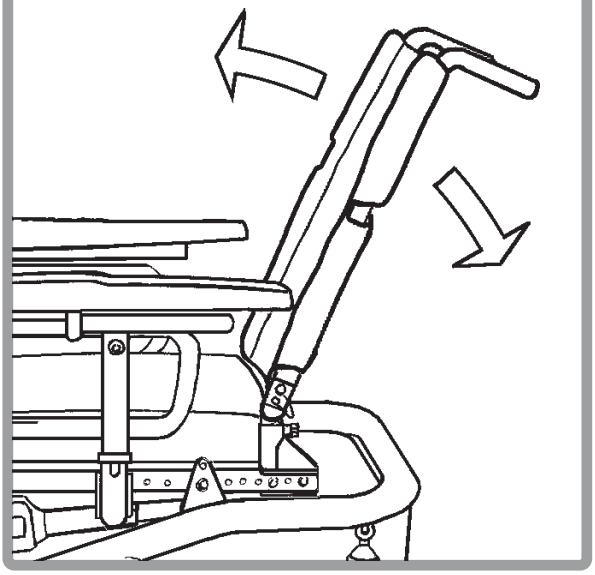
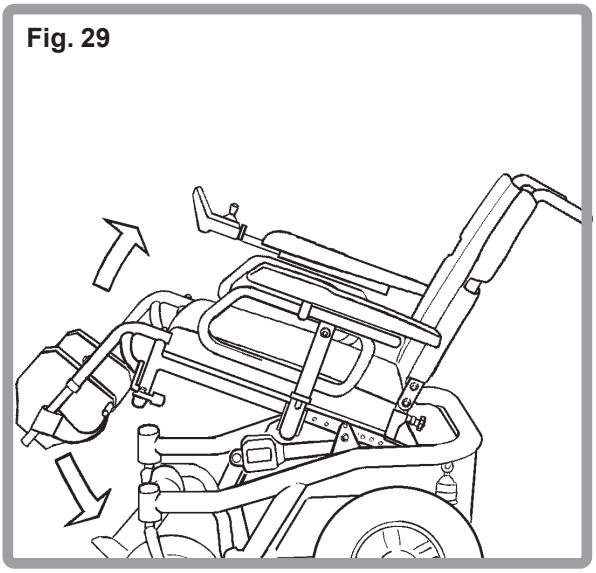


Fig. 29



Seating

Seat riser adjustment

The seat can be raised up to approx. 30 cm from its standard lowest position. If the riser function is fitted in combination with a powered backrest, the backrest will always be adjusted automatically to a straight position as soon as the seat is raised. For your own safety we strongly recommend that you do not use the backrest option in a raised position.

⚠ WARNING

The maximum load is reduced to 100 kg if this option is fitted.

The maximum tilt adjustment is limited to 10° if fitted. As soon as the seat is raised, the maximum speed is reduced to 25% of its adjusted speed. When driving the chair in a raised position do not climb kerbs or drive on slopes for your own safety. To raise the speed, return the seat down to its lowest position. The speed will be set to its standard adjustment automatically.

⚠ WARNING

While the chair is in a raised position the stability is greatly reduced. We strongly recommend that the seat is lowered before negotiating slopes and inclines

Manual recline adjustment

To Recline the seat locate the handwheel knob under the front of the seat. Turn the wheel right or left until the Seat is adjusted to the desired position.

Seating

Cleaning instructions for standard seating

Clean regularly to prevent build up or soiling.
Clean with a damp soapy cloth and rinse well with clean water. Dry the surface thoroughly.
Disinfectants may be used in dilution as specified by their manufacturer. Ensure surfaces are then rinsed with clean water and dried thoroughly.

Cleaning instructions for contoured seating

Clean regularly to prevent build up or soiling.
Clean with a damp soapy cloth and rinse well with clean water. Dry the surface thoroughly.
A soft brush with soapy water may be used to remove stubborn dirt. Ensure surfaces are then rinsed and dried.
Some chemical colourings, e.g. ball point pen, food colourings or clothes dyes should be removed immediately to prevent long term staining.
Do not use solvents, bleaches, abrasives, synthetic detergents, wax polishes or aerosols.
Disinfectants may be used in dilution as specified by their manufacturer. Ensure surfaces are then rinsed with clean water and dried thoroughly.

⚠WARNING

Never use the chair without a seat cushion in place. The velcro that is on the seat plate that holds the cushion to the chair could cause skin abrasions or damage to clothing.

Check the upholstery regularly for signs of damage or wear. Sagging or damaged upholstery may cause problems with posture.

Recaro Seating

Fitting

Fitting kit includes recaro seat and sunrise fitting kit, Fig. 30 and 31 shows the arrangement of saddle washers, spacers and screws to be fitted.

Cleaning Instructions

You should remove stains on your seat as soon as possible. After a long period of use, you should clean the cover of your seat with a standard commercially available dry foam cleaning agent. You should always clean the whole surface and not just individual spots in order to avoid unattractive edges. You should remove stains on your seat as soon as possible. The longer you wait the more difficult it will be to remove them.
Avoid powerful rubbing with aqueous solutions. This will roughen up cover fabric.

Fig. 30

Dirt stains (eg. beer, blood, cola, red wine etc) are best removed with the dry foam cleaning agents or with a mild-action. Please follow the respective instructions for use when treating the covers. The covers should be allowed to dry for at least 48 hours after cleaning with foam cleaning agents.

Grease stains (eg. ballpoint pen, lipstick, chewing gum etc) use a solvent such as petroleum ether. Carefully rub the soiled location on the surface only with a clean cloth impregnated with solvent.
Important: Use only a very small quantity of solvent. The upholstery material must not be saturated, since the solvent might then attack it and destroy it.

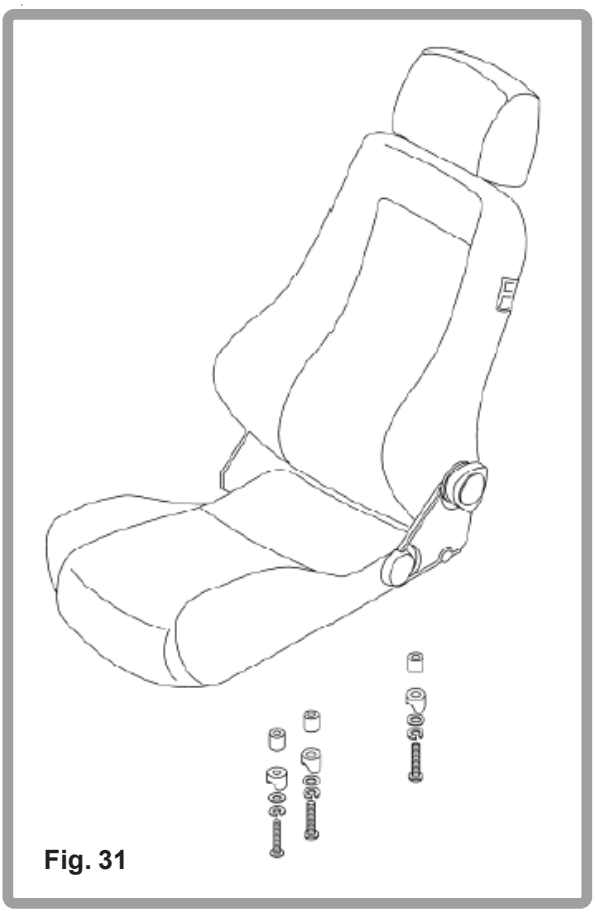


Fig. 31

Headrest

Fitting

To fit the headrest, fit the location bracket to the backrest brace using the screws and nuts supplied, ensuring that they are fully tightened (Fig. 32).

The headrest height is changed by slackening knob 'A', and sliding the inner vertical tube to the desired position and tighten the knob.

The headrest to seat depth is adjusted by slackening knob 'B', and sliding the inner tube/headrest to the desired position, and tighten the knob.

If greater depth adjustment is required, slacken knob 'A' fully, remove the vertical inner tube from the post and rotate it through 180°. Finally relocate the inner tube and tighten the locking knob.

To adjust the headrest angle, loosen lever 'C', position the headrest as required and lock with the lever.

The wings of the headrest are adjusted with an Allen key. Unzip the cover to reveal the two Allen screws, slacken the screws, reposition the wings and tighten the Allen screws. Finally re-zip the cover.

⚠ WARNING

This headrest must **not** be used when transprting the chair in a vehicle

Inspect the headrest regularly to make sure that the upholstery is not worn and correctly supports the head.

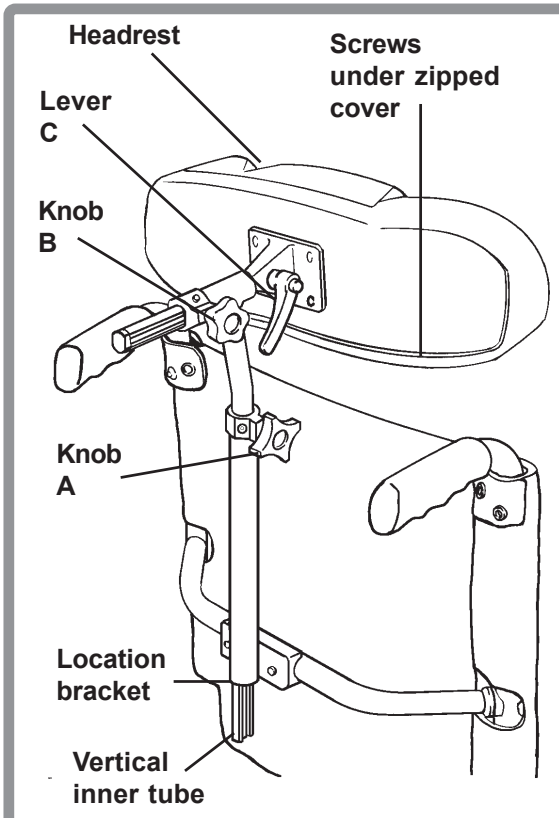


Fig. 32

Cleaning instructions

Clean regularly to prevent build up or soiling.
Clean with a damp soapy cloth and rinse well with clean water. Dry the surface thoroughly.
Disinfectants may be used in dilution as specified by their manufacturer. Ensure surfaces are then rinsed with clean water and dried thoroughly.

The Penny and Giles Pilot + control pod

Power supply

Ensure the power lead is connected correctly into its socket on the rear of the control pod (Fig. 33).

The immobiliser plug

When this is activated the chair will not function, other than the hazard warning light system. This may be useful if you wish to leave your wheelchair unattended (Fig. 33).

To activate the immobiliser

1. Switch the chair on via the On/Off button (Fig. 34).
2. Insert the immobiliser plug into the charger/programmer socket located on the front of the control pod.
3. Remove the plug after 1 - 2 seconds.
4. Your chair should now be immobilised.

To de-activate the immobiliser

1. Switch the chair on via the On/Off button (Fig. 34).
2. Insert the immobiliser plug into the charger/programmer socket located on the front of the control pod.
3. Remove the plug after 1 - 2 seconds.
4. Your chair should now be ready to use.

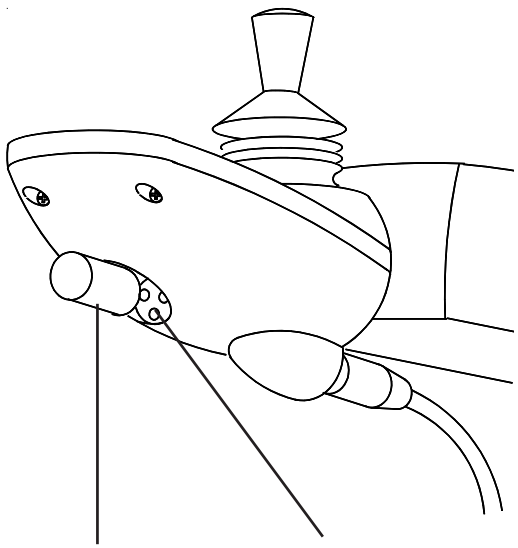


Fig. 33

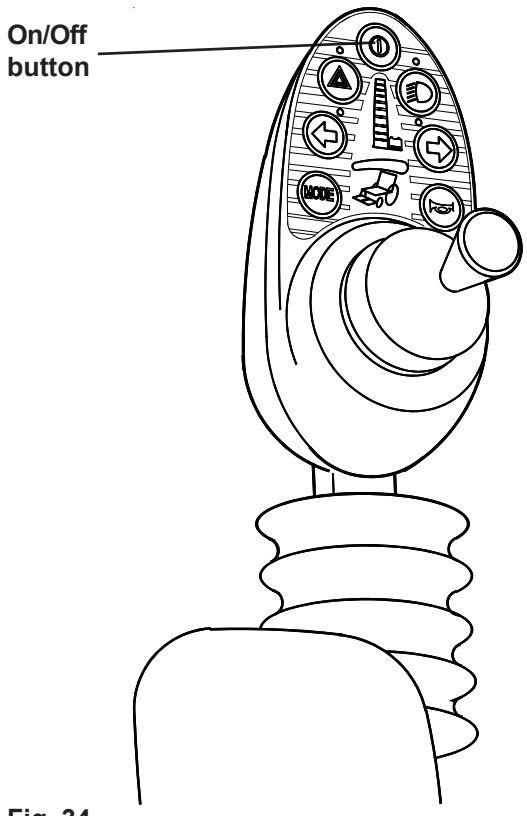


Fig. 34

Adjustable speed setting

Your controller has five speed settings. To adjust:

1. Press the mode button until the speed settings indicator is flashing (Fig. 35).
2. Increase or decrease the speed setting by pushing the joystick to the left or right respectively, until the required setting is obtained. To activate the setting either push the joystick forwards to drive or press the mode button until the flashing lights are no longer flashing.
3. When the third or middle speed indicator light is selected on a 10 km/h chair, the vehicle is set at 4mph. **Please note that this is the maximum speed permitted for pavement travel.**

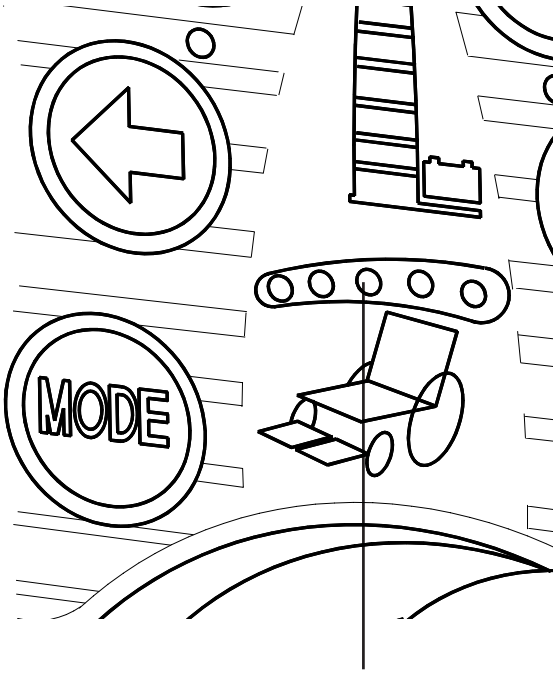


Fig. 35

Battery level indicator

This has ten colour coded lights, 3 red, 4 orange, and 3 green, and denotes the state of charge of the batteries (Fig. 36). Green is high, Orange is low, and Red is dangerously low. The most accurate reading is attained when the chair is stationary and on a level surface. The lights also help indicate the position of a fault (should the need arise). When in fault, the lights will flash quickly. Noting the number of lights flashing may help your service agent in simple fault finding.

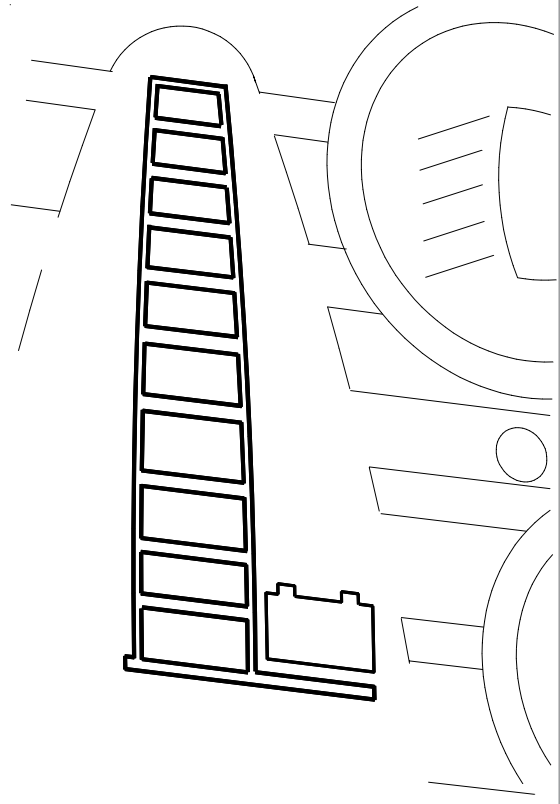


Fig. 36

The Penny and Giles Pilot + control pod

Indicators

The right hand button operates the right side front and rear indicators. The left button operates the left side front and rear indicators. To cancel press the button again (Fig.37).

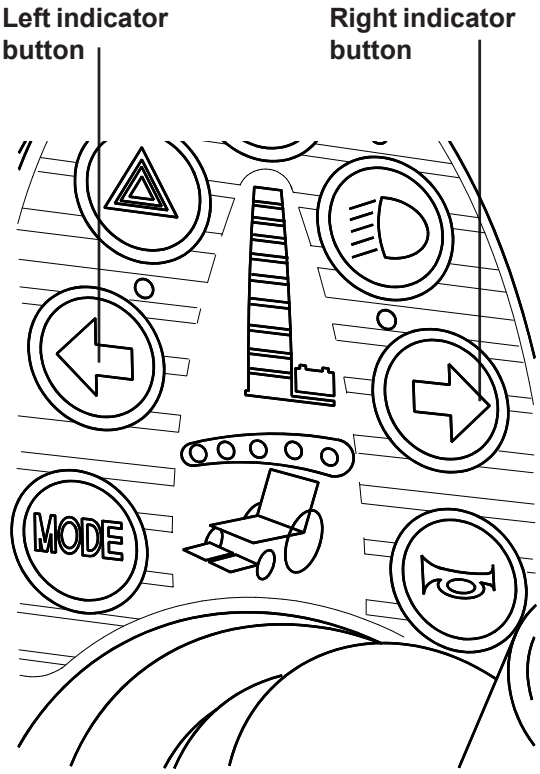


Fig. 37

The horn button

When pressed the horn buzzer will sound, it stops when you release the button (Fig. 38).

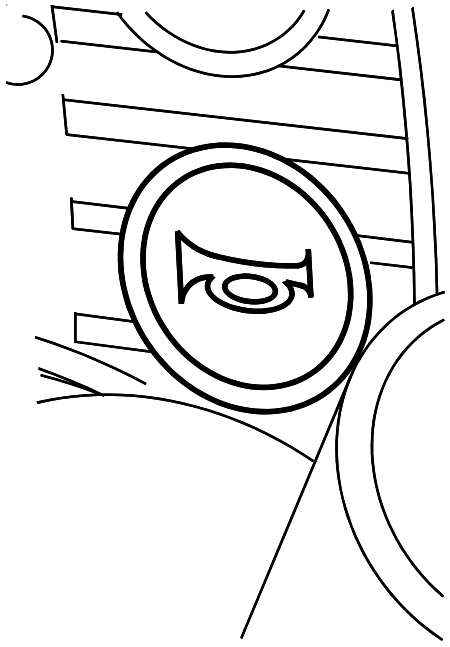


Fig. 38

Hazard lights

Depressing the button will operate the front and rear hazard lights. This is effective either when the chair is switched On or Off.
The two indicators will flash intermittently until cancelled by pressing the button again (Fig. 39).

Hazard lights button

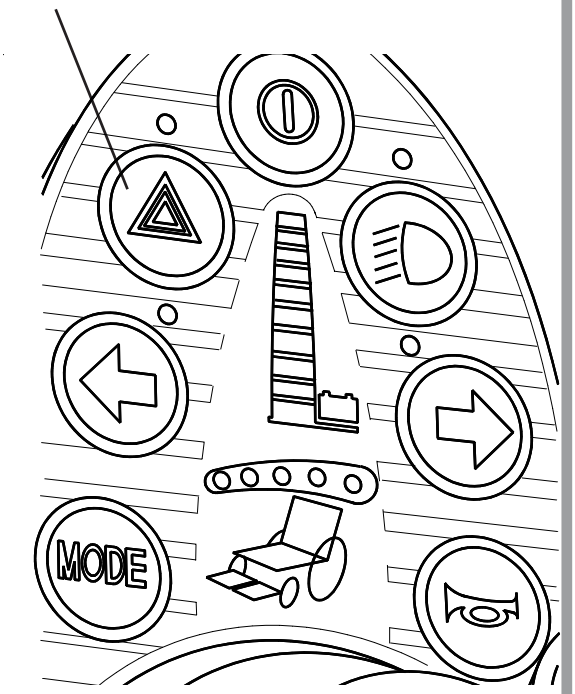


Fig. 39

Main lights

Depressing this button will operate the lights (Fig. 40) only when the chair is switched on. Pressing it again will switch the lights off.

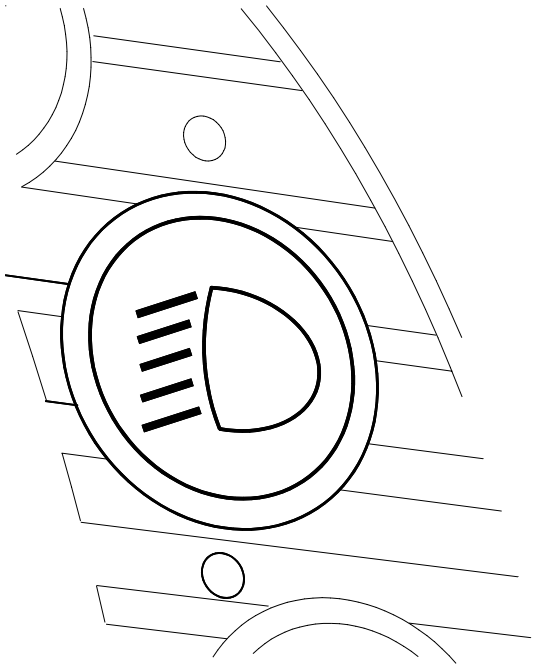


Fig. 40

The Penny and Giles Pilot + control pod

Actuator mode function

This will be included on your remote control pod if you have one or more electric options fitted to your chair. Refer to Fig. 41.

Menu select

To chose an electric option press the mode button until the red lights are visible on the wheelchair diagram next to the joystick. Move the joystick to the left or right to indicate which function can be used.

Legrest left **Backrest recline**

Seat tilt

Legrest right **Both legrests**

When the desired function has been chosen you can activate the electric actuator system.

If you attempt to operate the electric functions when driving, the chair will automatically come to a safe stop. We recommend you only use the electric options whilst stationary.

Up/down movement

Once the relevant electric option has been chosen the required movement is achieved by moving the joystick forwards or backwards.

Programme port

This will enable an approved service agent to reprogramme your chair and also gain useful information when tracing any faults (Fig. 42).

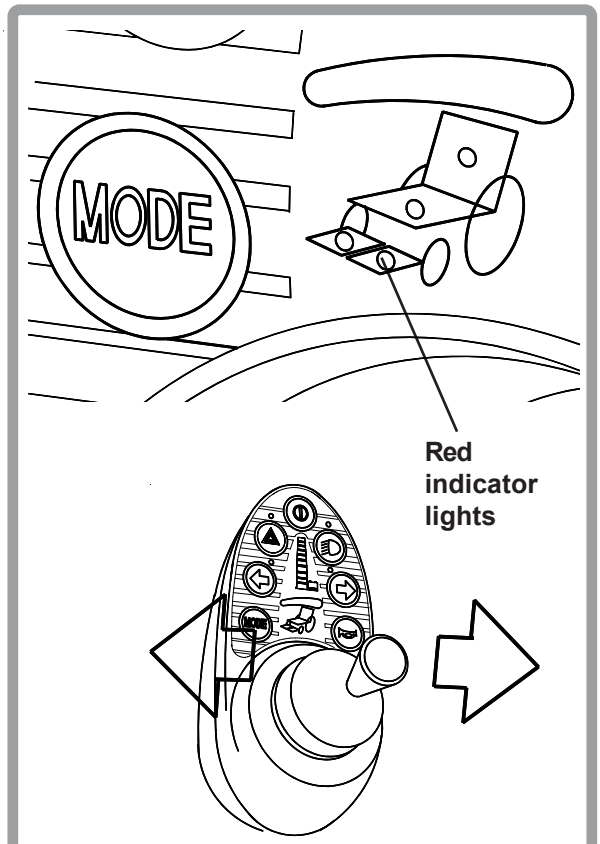


Fig. 41

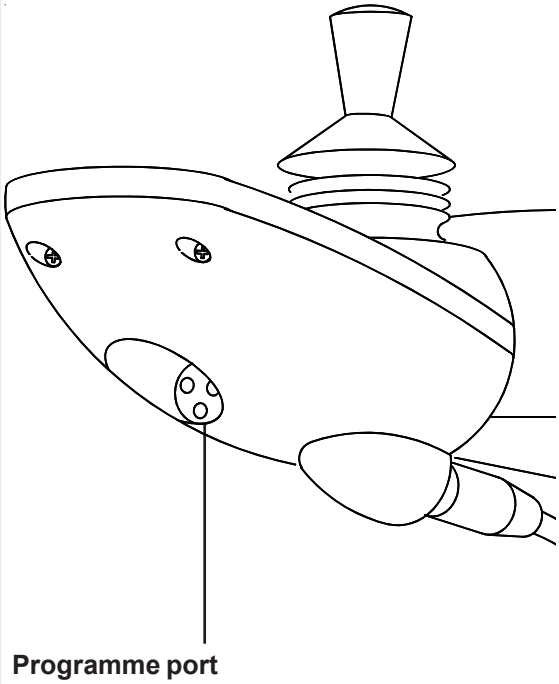


Fig. 42

The Penny and Giles Pilot + control pod

Charging socket

See section on charging.

Operating the control joystick

When engaging the main On/Off switch, allow a few seconds prior to moving the joystick. This allows the system to self check. If you move the joystick too soon, the battery level indicator display will flash, disabling drive to your wheelchair. Whilst this is not harmful to your wheelchair, you will need to switch off and then back on to clear the system.

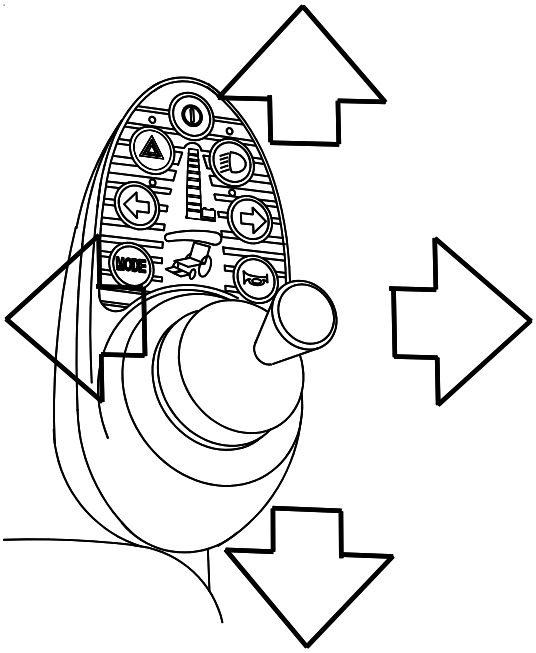
To steer, simply move the joystick in the direction you wish to go. Proceed slowly at first, i.e. do not push the joystick too far forward.

Brakes will operate as soon as the joystick is released and allowed to return to its centre position. On level ground, this should bring you to a halt within one chair's length (6 km/h model). On a steep hill, it may travel slightly further and you will notice the brakes being automatically applied when the chair is nearly stationary. Once the brakes have been applied, switching off will make no difference to the brakes, although it is always safer when remaining stationary for a period of time to switch off.

⚠ WARNING

If you need to stop in an emergency, the simplest and safest way is to just release the joystick. This will bring the chair to halt in a controlled manner.

A second means of bringing the chair to a halt is to press the On/Off switch. This method is not recommended as the chair will stop very abruptly and will cause unnecessary wear in the chairs braking system.



The Penny and Giles Pilot + control pod

Summary

1. To steer, simply move the joystick in the direction you wish to go (Fig. 43).
2. The further you move the joystick, the faster you will go.
3. New users should use slower speeds until they feel confident when driving the powerchair.
   Adjust the speed range as explained on the previous pages
4. The brakes will automatically stop the wheelchair from any speed when the joystick is released.
5. Switching off immediately applies braking and is not recommended for normal use.
6. It is important that the chair is stationary when changing direction from reverse to forward.
7. Always switch to off before getting into or out of the chair.

Cleaning instructions

Should the control of your wheelchair become soiled or dirty, it can be wiped with a damp cloth with a dilute disinfectant until clean. This is important should the wheelchair be used by more than one person to ensure there is no cross infection.

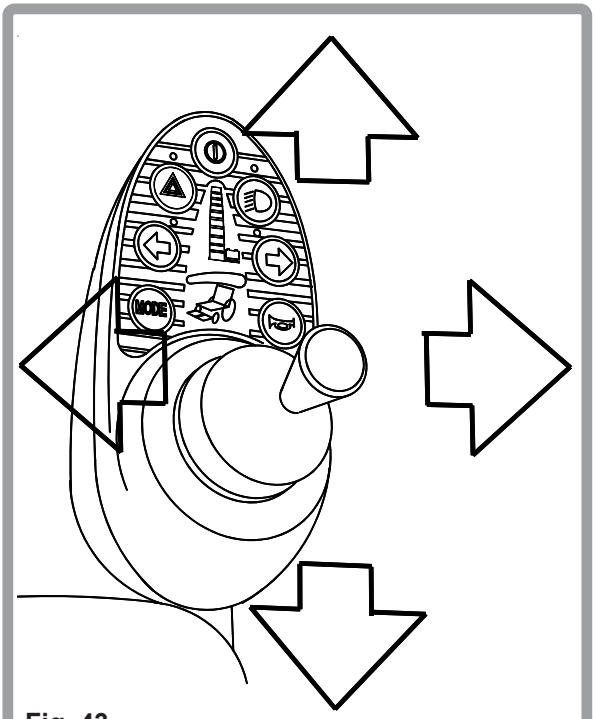


Fig. 43

⚠WARNING

Ensure that you always have comfortable access to the controls whilst the chair is moving.

It is important that the joystick boot is replaced if it is torn or brittle, failing to do so could cause substance damage to the controller and unexpected movement of the chair.

Always turn off the power to the controller when you are not manoeuvring the chair or when you are transferring in or out of the chair etc.

Do not replace the joystick knob with any unauthorised item. It may cause hazardous operation and loss of control of the chair.

Parallel Swing-Away

⚠ WARNING

Before adjusting the swing-away arm, switch off the controller to avoid accidental displacement of the joystick which would cause unwanted movement of your wheelchair.

Gently apply pressure to the side of the controller nearest the user and as close as possible to the front of the controller.

The controller will move outward and then backward before reaching its fully back position.

⚠ WARNING

Keep your fingers and clothing, etc. clear while operating the swing-away mechanism.

If required, your wheelchair can be operated with the swing-away mechanism in its fully back position, but only for slow manoeuvering such as positioning the wheelchair closer to table tops, etc. See Fig. 44.

To revert to the normal driving position, switch off the power and pull the arm outwards and then forwards before returning the arm to its 'home' position. Make sure the controller is fully engaged in its home position before switching on and operating the wheelchair in the normal manner.

⚠ WARNING

Be aware that the width of you chair has increased if the swing-away arm is out and you may not get between certain obstacles.

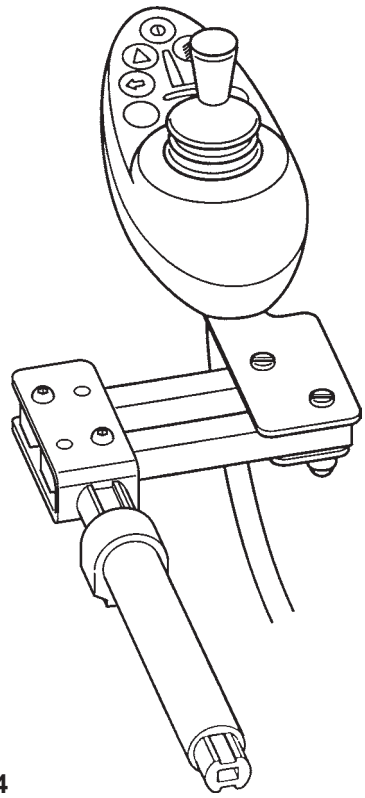


Fig. 44

⚠ WARNING

Do not hang any items on or over the parallel swing-away remote assembly as this could damage the swing-away mechanism.

When transferring to and from the wheelchair do not use the remote as a means of support.

Keep fingers, clothing, etc. clear of the swing-away mechanism at all times.

Ensure the power is switched off while adjusting the parallel swing-away arm.

Only operate the wheelchair at low manoeuvring speed when the parallel swing-away is in use.

Attendant and Dual Control, Pilot+

Note

The Attendant control system is the Standard Control System mounted at the rear of the chair for use by an attendant only. Please refer to the Standard Control System user guide for usage instructions. See pages 34 - 40.

You should be aware that the attendant has the power to overide the control of the chair on a dual control system.

Cleaning instructions

Should the control of your wheelchair become soiled or dirty, it can be wiped with a damp cloth with a dilute disinfectant until clean. This is important should the wheelchair be used by more than one person to ensure there is no cross infection.

⚠ WARNING

Ensure that you set the speed of the attendent control to a speed that you can comfortably follow.

Ensure that you always have comfortable access to the controls whilst the chair is moving and make sure that the controller is fixed securely to the chair.

It is important that the joystick boot is replaced if it is torn or brittle, failing to do so could cause substance damage to the controller and unexpected movement of the chair.

Always turn off the power to the controller when leaving the user in the chair.

Do not replace the joystick knob with any unauthorised item. It may cause hazardous operation and loss of control of the chair.

Centre bar mounted Pilot+

⚠ WARNING

Ensure that you always have comfortable access to the controls whilst the chair is moving. Make sure that the controller is fixed securely to the centre bar. See Fig. 45.

It is important that the joystick boot is replaced if it is torn or brittle, failing to do so could cause substance damage to the controller and unexpected movement of the chair.

Always turn off the power to the controller before moving the controller out of the way.

Do not replace the joystick knob with any unauthorised item. It may cause hazardous operation and loss of control of the chair.

Ensure that all extremities and clothing are free when positioning the centre bar for use.

Cleaning instructions

Should the control of your wheelchair become soiled or dirty, it can be wiped with a damp cloth with a dilute disinfectant until clean. This is important should the wheelchair be used by more than one person to ensure there is no cross infection.

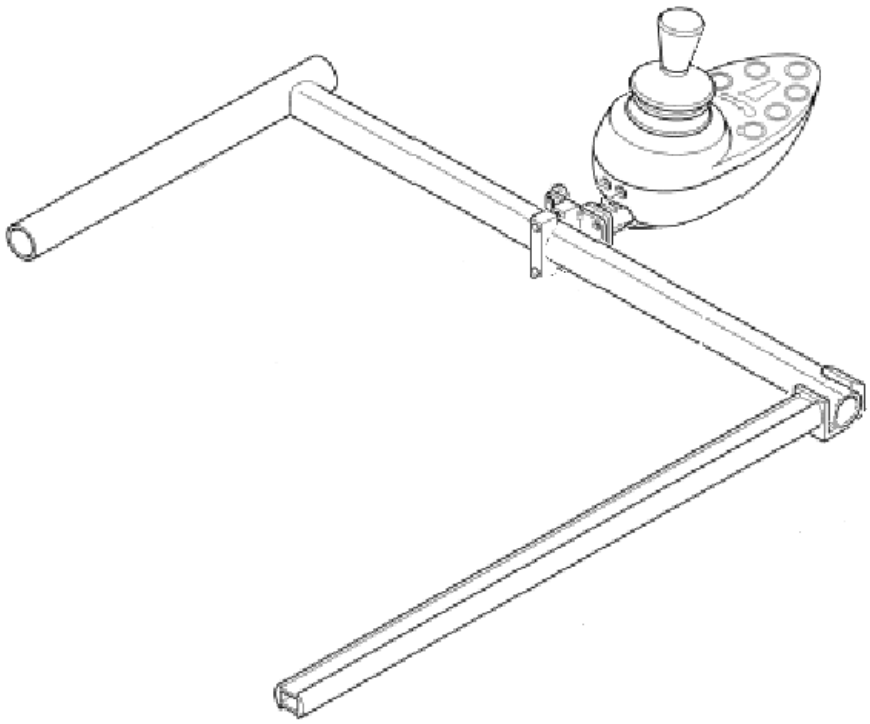


Fig. 45

Centre tray mounted Pilot+

Cleaning instructions

The tray must be regularly cleaned using a soapy damp cloth.

Do not use abrasive cleaners or cloths as they could scuff the surface of the tray
Do not use solvents.

Make sure that the tray is thoroughly cleaned regularly especially if the chair is to be used by another user.

Should the control of your wheelchair become soiled or dirty, it can be wiped with a damp cloth with a dilute disinfectant until clean. This is important should the wheelchair be used by more than one person to ensure there is no cross infection.

Fitting

Affix the mounting tube to the underside of the armrest with the 2 screws provided. Now slide the extruding bar into the mounting bracket until it clicks into place. See Fig. 46.

Fig. 46

⚠ WARNING

The maximum weight allowed for the tray is 2.5kg.
Do not to overload the tray, this could cause the tray to break or could cause the chair to become unstable.

Ensure that you always have comfortable access to the controls whilst the chair is moving and make sure that there is nothing on the tray that could interfere with your control of the chair.

It is important that the joystick boot is replaced if it is torn or brittle, failing to do so could cause substance damage to the controller and unexpected movement of the chair.

Always turn off the power to the controller before moving the tray out of the way.

Do not leave lit cigarettes or other heat sources on the tray as this could cause the tray to deform and mark.

Ensure that all extremities and clothing are free when positioning the tray for use.

Do not replace the joystick knob with any unauthorised item. It may cause hazardous operation and loss of control of the chair.

Lights and indicators (optional extras)

Rear lights and indicators

Where lights are not factory fitted, they may be fitted as an optional extra by an approved Sunrise Medical service dealer (Fig. 47).

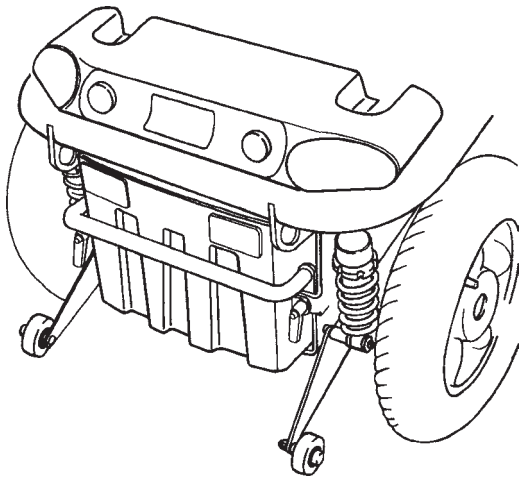


Fig. 47

Front lights and indicators

Where lights are not factory fitted, they may be fitted as an optional extra, by an approved Sunrise Medical service dealer (Fig. 48).

⚠WARNING

Ensure that the lights and indicators are functioning correctly and lens are clean before going outdoors at night.

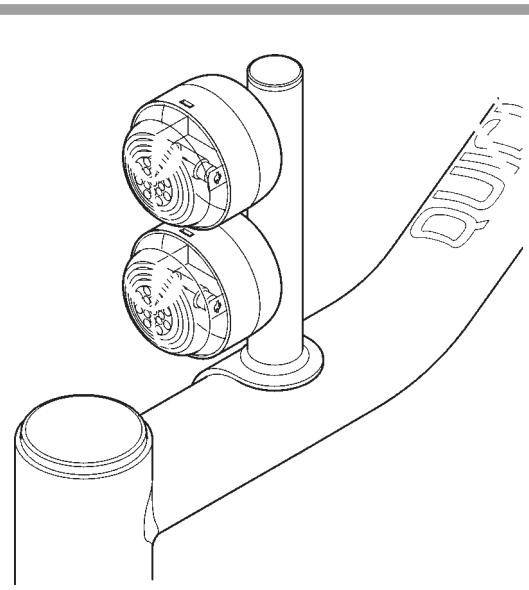


Fig. 48

Crutch holder (optional extras)

Using a crutch holder.

Your crutch holder (see fig 48) should be fitted by an authorised Sunrise dealer to the lower section of the push handle. A Velcro strip should also be fitted to the top section of the push handle and on at relevent position on your crutch.

Take your crutch and drop it into the cup fitted to the bottom of the push handle. Line up the Velcro strip on the push handle and cruth and push together, firmly fixing the crutch to the chair. See Fig. 49.

Fig. 49

⚠ WARNING

Make sure that the crutch is securely fastened to the crutch holder.

Make sure that the crutch is not interfering with the mechanisms of the chair.

Make sure that the crutch does not protrude from the chair.

Do not attempt to remove the crutch whilst the chair is in motion.

Always come to a complete stop and turn off the power to the controls before attempting to remove the crutch. This will avoid accidentally operating the chair.

Swing away tray (optional extras)

Fitting

Fix the tray table mounting bracket to the underside of the desired armrest with trhe 2 fixing screws provided.

Slide the extruding bar into the mounting bracket until it clicks into place and is secure.

To position tray infron of user or by side of chair press down on the latch to release bar and swing over into place. See Fig. 50 below.

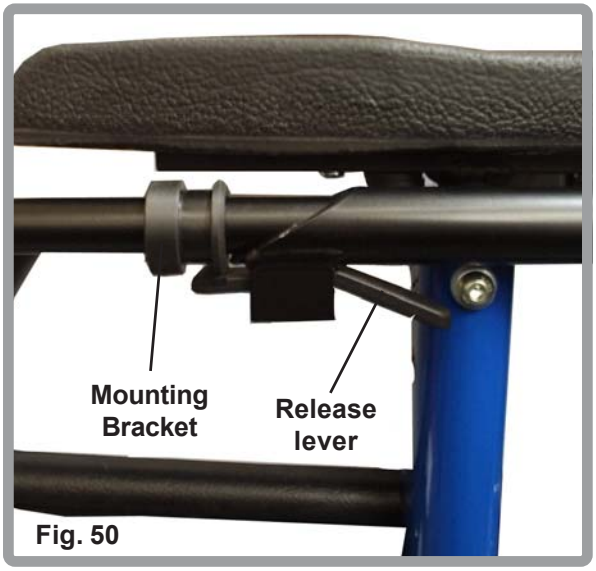


Fig. 50

⚠WARNING

The maximum weight allowed for the tray is 2.5kg.
Do not to overload the tray, this could cause the tray to break or could cause the chair to become unstable.

Do not leave lit cigarettes or other heat sources on the tray as this could cause the tray to deform and mark.

Ensure that all extremities and clothing are free when positioning the tray for use.

Cleaning instructions

The tray must be regularly cleaned using a soapy damp cloth.
Do not use abrasive cleaners or cloths as these could scuff the surface of the tray.
Do not use solvents.

Side Cushions (optional extras)

Fitting

The side cushion comes in a pair and complete with 2 self adhesive Velcro strips, used to fix the cushion to the armrest. Fix the loose Velcro strips to the strips on the cushion and remove the backing of the strip. Finally line up the cushion with the armrest side guards and when in place push to fix. See Fig. 51 below.

Fig. 51

Cleaning instructions

Clean regularly to prevent build up of soiling.

Clean with a damp soapy cloth and rinse well with clean water. Dry the surface thoroughly.

Disinfectants may be used in dilution as specified by their manufacturer. Ensure surfaces are then rinsed with clean water and dried thoroughly.

⚠ WARNING

Ensure that no smoking material drops in between the cushion and user.

The hook part of the Velcro that is used to attach the cushion to the chair can cause abrasions to the user if it is left in contact with the skin. It can also cause damage to clothing.

Check the condition of the cushion and the fabric to make sure there has been no deterioration that could affect your posture in the chair.

Kerb climber

Fitting

Simply locate both ends of the kerb climber into the 'U' shaped brackets, and clip into place with the two spring clips (Fig. 52).

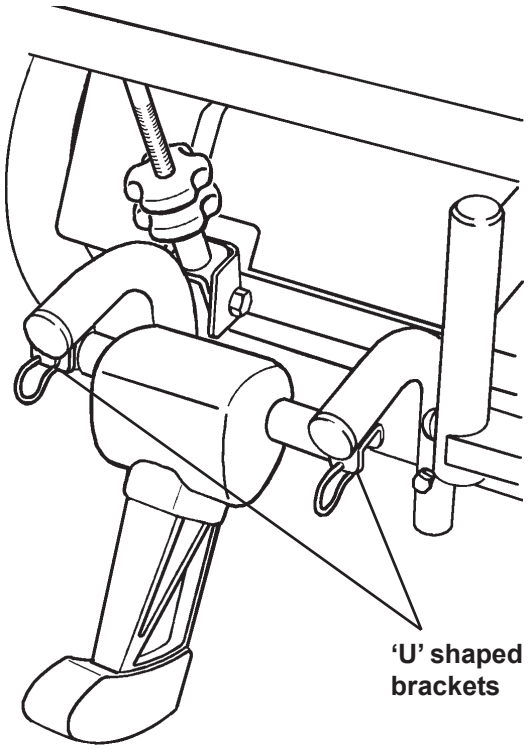


Fig. 52

Mounting the kerb

1. Approach the kerb head on driving forwards slowly and steadily (Fig. 53).
2. As the kerb climber makes contact with the kerb, the wheelchair should be moving very slowly. Small kerbs can be climbed from a standstill.
3. Apply sufficient power to the motors to lift the front of the chair up onto the kerb, and then apply slightly more power and speed, so that the drive wheels climb the kerb smoothly and without hesitation. As far as possible, keep the joystick in the straight forward position.

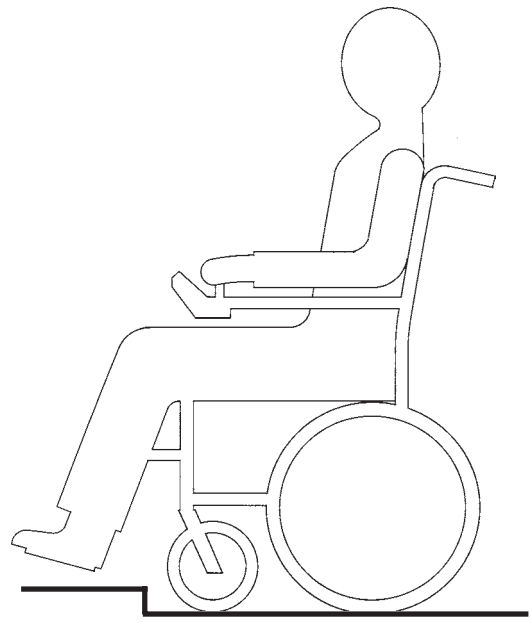


Fig. 53

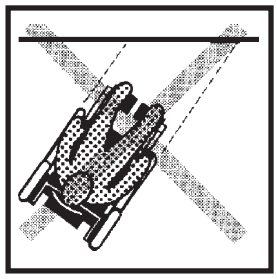
Kerb climber

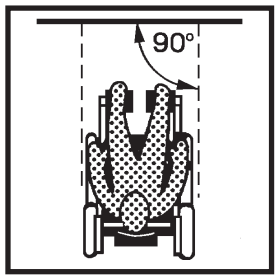
Dismounting the kerb

1. Reverse the chair slowly and carefully until the rear wheels are on the edge of the kerb.
2. Reverse as slowly as possible off the kerb with the rear wheels. You will feel more secure if you can lean forward, but if you can't, don't worry, the wheelchair is extremely stable as long as you stay within its limitation, you will be quite safe. The front of the chair will naturally follow down the kerb, as you continue to drive slowly backwards.

⚠ WARNING

1. Please show the utmost consideration for the other traffic on the road. Remember that the last thing a car or lorry driver expects to see is a wheelchair backing off the kerb into the road. If in any doubt, do not risk crossing the road until you are certain that it is safe.
2. Always cross the road as quickly as possible, there may be other traffic.
3. Do not attempt to go up or down more than a 10 cm (4") high kerb.
4. Do not attempt to use the kerb climber on a series of steps.
5. Do not attempt high kerbs if on steep slopes or cambers.
6. Do not attempt any kerbs in the vicinity of drain covers, uneven or gritty road surfaces.
7. Do not attempt to dismount a kerb any higher than 5 cm (2") in the forwards direction.
8. Do not mount or dismount kerbs at an angle other than straight on (90°) to the edge of the kerb.





9. Prior to climbing ensure your legrests will clear the kerb, your seat angle is at a maximum of 4° and your back in an upright position.
10. Do not climb kerbs with the riser option, while the seat is in a raised position.

Batteries

The batteries are contained within a tray located under the seat, which is retained by a bar.

Removing

1. To remove the batteries, should they require changing or maintenance, unscrew the two locks by rotating anti-clockwise approximately 1/4 turn at a time. Depress the centre button to allow the locking lever to rotate freely into a position where the unlocking process can be repeated once the centre button has been released.
2. Repeat this 'ratchet' action until both locks and the retaining bar can be removed, and then slide the tray backwards, using the hand grip area under the centre of the tray (Fig. 54 and 55). The tray will lock two thirds of the way out (Fig. 54).

⚠WARNING

Batteries weigh up to 55 lb (25 kg). Lifting batteries may cause back strain. If you fail to heed these warnings severe injury may occur.

3. Connect and disconnect battery cables with caution. Connect the red lead to the positive terminal and the black lead to the negative terminal. Do this for each battery.
4. Tighten all terminal fasteners using two 10mm wrenches to 6.8Nm.

⚠WARNING

Never make direct contact across both battery terminals, as an explosion may occur. A spark may result in an explosion and/or fire resulting in severe injury or death.

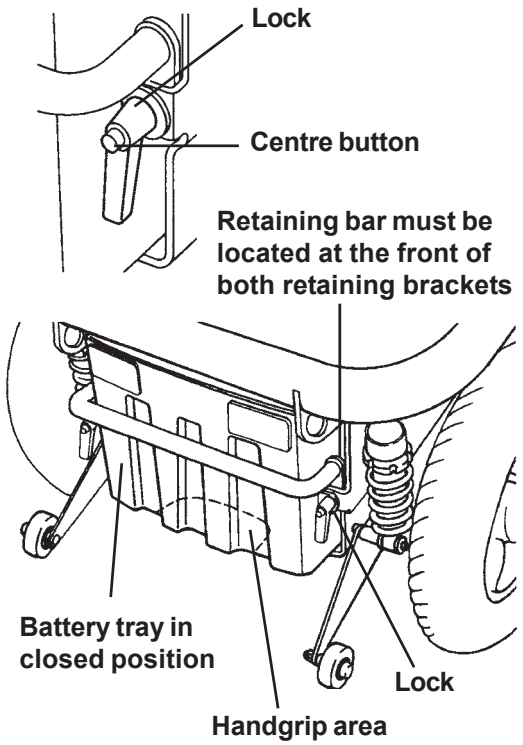
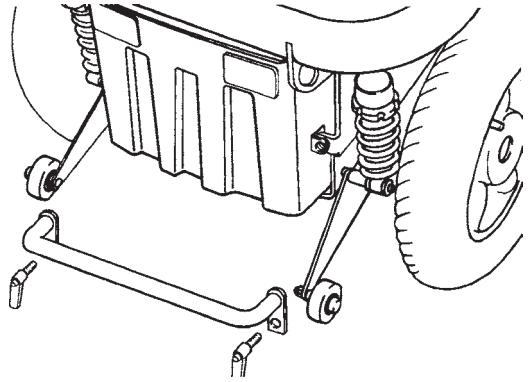


Fig. 54



Battery locks and retaining bar removed to permit the battery tray to slide open

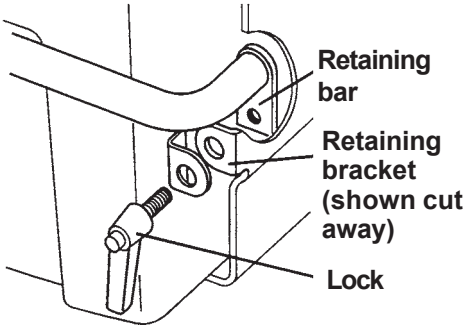


Fig. 55

Removing/Refitting

Disconnect both the connecting lead plugs (Fig. 56), pull up the straps on either side of the rear battery and lift it out. Pull the front battery to the rear of the tray and repeat the process.

⚠ WARNING

To refit reverse the process, ensuring that the straps are folded into the battery tray. You must ensure that the tray is securely locked into place and cannot slide back prior to use. Failure to lock the battery box correctly could cause your wheelchair to be unstable.

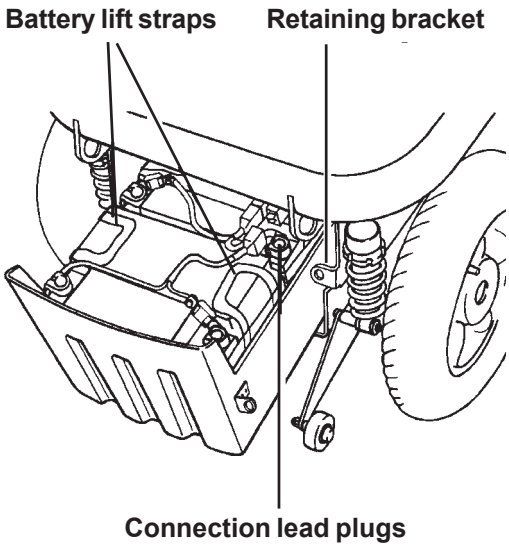


Fig. 56

Safety cut-outs

In the event of a short circuit, there are safety systems built into your wheelchair to safeguard your electrical circuits. Fusible links are connected on to the battery terminal posts (Fig. 57), should your chair suffer a short circuit these links will break the circuit. To replace them contact your local Sunrise Medical service dealer, who will also diagnose the fault.

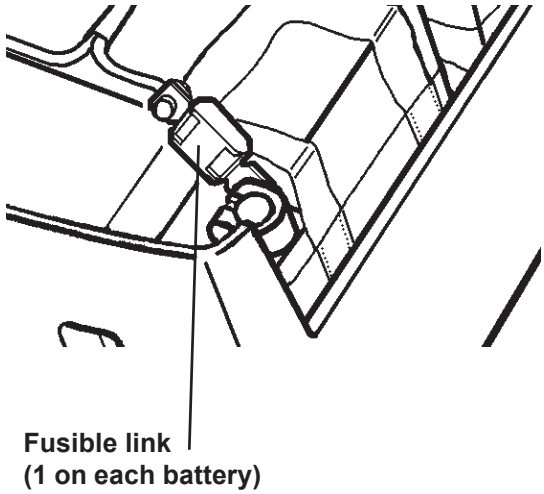


Fig. 57

Batteries and charging

General information

Batteries are the power source for almost all of the modern mobility products available today. The design of batteries used in mobility products is significantly different to the batteries used to start a car for example. Car batteries are designed to release a large amount of power over a short period of time, whilst mobility batteries (commonly called deep cycle batteries) release their power evenly, over a long period of time. Therefore, due to the lower production volumes and increased technological requirements, mobility batteries are typically more expensive.

Commonly two 12 volt batteries are used together in a mobility product, giving a total voltage of 24 volts. The size of the battery, (e.g. its available power) is expressed in amps per hour e.g. 30 amp/hr. The higher the number, the bigger the battery size and weight then potentially, the greater the distance you can travel.

Sunrise Medical only fit as standard maintenance free batteries into this type of wheelchair.

Maintenance free batteries

This type of battery uses a method of carrying the electrolyte commonly referred to as 'gel', that is held within the battery case. As the name implies, no maintenance is required other than regular charging. You can safely transport this type of battery without fear of acid spilling.

Furthermore, they are approved for transportation on aircraft.

Battery care

Pages 54 - 59 set out a battery care plan for maintenance free batteries. This has been agreed between Sunrise Medical and the battery manufacturers, to enable you to get the best out of your batteries. If a different care plan is followed, this may result in lower than expected performance from your mobility vehicle.

Batteries and charging

Maintenance free battery care plan

1. Only use an approved Sunrise Medical charger compatible with the vehicle to be charged.
2. Charge your batteries every night, regardless of the amount of use your mobility device has had during the day.
3. Do not interrupt the charging cycle.
4. If your mobility device is not required for use, it should remain connected to the charger until required. This will not damage your batteries, so long as the mains socket/plug is left switched on. Turning the mains socket/plug off, but leaving the mains cable plugged in will eventually deplete your battery charge.
5. If you leave your vehicle for an extended period (more than 5 days) disconnect the main battery lead.
6. Failure to allow for recharge will damage the batteries and can lead to shortened distances and premature failure.
7. Do not top up the charge of your batteries during the day. Wait until the evening for a full overnight charge.
8. As a general rule, maintenance free batteries take longer to fully charge than lead acid batteries.
9. The battery terminals need to be checked regularly for signs of corrosion. If any corrosion is apparent, then clean the terminals completely (a wire brush is ideal) and re-grease the terminal using Vaseline petroleum jelly, not ordinary grease. Ensure that the terminal nut and bolt, cable clip and exposed cable are completely covered with jelly.
10. Following all the points above should result in a healthier battery, greater range for the vehicle user and a longer life for your batteries.

⚠ WARNING

Do not expose any part of the battery to direct heat (i.e. naked flame, gas fire).

When charging always place on a hard surface in a room with good ventilation.

You should not charge your batteries in outdoor conditions.

⚠ WARNING

Always use the charger that comes with your wheelchair. Read and follow all instructions and warnings.

Batteries and charging

General

The external charger (Fig. 45) has been designed to charge two 12 volt Dryfit Gel type batteries.

Safety features

The chargers have features which prevent hazards or accidents occurring as a result of connecting batteries the wrong way round, overheating caused by fault conditions, or attempting to charge wrong voltage batteries.

The majority of charger sizes are electrically double insulated and no earth connection is required. Some larger sizes may be electrically earthed and this will be clearly stated on the label.

The 3 pin UK mains input plug contains a replaceable fuse. The rating of this fuse is shown on the charger label. Always replace with the same type and size of fuse as specified. Fitting of different fuses can result in damage to the charger or failure of the charger to operate properly.

If your charger has been specified for use in Continental Europe it will contain a European two pin plug which does not have a fuse. In this case the fuse is located in the fascia panel of the charger.

Fault finding guide

If having followed the correct steps to start battery charging the charger does not operate as described, then check as follows:

No charging indicator

The connection between the charger and the batteries has not been made.

Mains supply

Check that the mains supply is on, that any fuses are intact and that the charger is switched on.

Deeply discharged batteries

If the battery voltage is below 16 volts the charger will not commence charging.

Procedure for charging using 24V charger

The 24V charger has four indicators to show the charger operation.

1. Connect the charger to the mains supply by means of the mains plug. The yellow ‘mains on’ light will come on.
2. At the start of charging the orange light will come on.
3. When 85% to 95% charged the yellow light will come on.
4. When fully charged the green light will come on.
5. Always switch off at the mains before disconnecting the batteries. See Fig. 58.

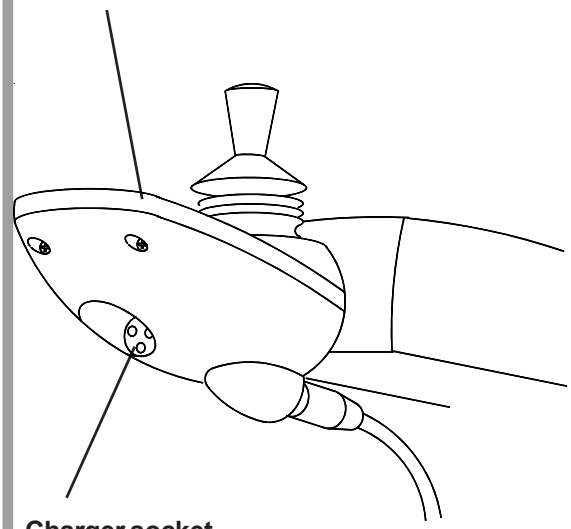


Fig. 58

Batteries and charging

⚠WARNING

Safety and caution notes

1. The chargers are designed for indoor use. Do not use outdoors or expose to rain, snow, spray or moisture.
2. The charger may be used with other Gel type batteries, subject to written confirmation from the Technical Department of Sunrise Medical.
3. Do not smoke, or create sparks or flames in the vicinity of the batteries.
4. Avoid standing the charger on carpets or rugs during use and do not cover the ventilation slots of the charger or allow objects to rest on the case.
5. Do not attempt to recharge other types of batteries such as car batteries, non-rechargeable batteries, AGM sealed batteries, wet electrolyte batteries or batteries of the wrong voltage.
6. Repairs should only be carried out by Sunrise Medical.
7. The charger is designed for mains input voltages of 220V AC to 240V AC.
8. Use of an attachment that is not recommended or sold by Sunrise Medical, may result in a risk of fire, electric shock or injury to persons. To reduce the risk of damage to electric plug and cord, pull by the plug rather than the cord when disconnecting the charger. Make sure the cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress. An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and electric shock. If any extension cord must be used, make sure the pins on the plug of the extension cord are the same number, size and shape as those of the plug on the charger; and that the extension cord is properly wired and in good electrical condition.

Batteries and charging

⚠WARNING

Do not rest a battery on top of the charger.
Do not stand the charger on a carpet or other soft surface. Always place it on a hard surface.
Do not operate the charger if it has received a sharp blow, been dropped or otherwise damaged in any way, take it to a qualified technician.
Do not disassemble charger; only have it repaired by the manufacturers. Incorrect re-assembly may result in a risk of electric shock or fire. To reduce the risk of an electric shock, unplug the charger from the outlet before attempting any maintenance or cleaning.
Turning off the controls will not reduce the risk.
Never place the charger directly above the battery being charged; gases from the battery will corrode and damage the charger.
Never Smoke or allow a spark or flame in the vicinity of the battery or charger. Be extra cautious to reduce the risk of dropping a metal tool on to the battery. It could spark or short circuit the battery or other electrical parts, that may cause an explosion. Also take off all personal metal effects and dangling objects when working on the battery.
Never charge a frozen battery. A fully charged battery will rarely freeze but the electrolyte of a discharged battery can freeze at 16° Fahrenheit (-9° Centigrade), any battery that is suspected of being frozen should be thawed completely before charging.

Note: When buying replacement batteries always consult your Sunrise Medical service agent.

Note: Before using your vehicle for the very first time, please charge the batteries for a period of 24 hours.

Battery warranty

Battery warranties are subject to periods set by the manufacturers, however, most of these warranties are subject to a wear and tear clause, and if you genuinely wear out your batteries in 6 months, it will not be possible to obtain a replacement under warranty.

⚠WARNING

All batteries, once they have reached the end of their useful life, are deemed to be hazardous waste.

For further information on handling and recycling contact your local recycling authority.

Always dispose of product through a recognised agent.

Batteries and charging

The range of your vehicle

Most manufacturers of mobility products state the range of their vehicles either in the sales literature or within the Owners Manual. The range stated sometimes differs from manufacturer to manufacturer even though the battery size is the same. Sunrise Medical measure the range of their vehicles in a consistent and uniform manner, but variances still occur due to motor efficiencies and overall product load weight.

The range figures are calculated to **I.S.O. Standard 7176. Part 4: Wheelchair Energy Consumption Theoretical Range.**

This test is carried out in controlled conditions with new, fully charged batteries, on a level test surface and a user weight of 75 kg. The range figures stated should be seen as a theoretical maximum and could be reduced if any single, or combination, of the following circumstances occur:

1. User weight heavier than 75 kg.
2. Batteries whose age and condition are less than perfect.
3. The terrain is difficult e.g. very hilly, sloping, muddy ground, gravel, grass, snow and ice.
4. The vehicle climbs kerbs regularly.
5. The ambient temperature is very hot or very cold.
6. Incorrect tyre pressures in one or more tyres.
7. The use of powered options (tilt, recline, riser, lights etc).
8. Lots of start/stop driving.
9. Also thick pile carpets within the home can affect range.

All this technical information may seem complicated and a little daunting, but please remember, that the battery sizes available on each Sunrise Medical product should give sufficient range to cope with the majority of customer's lifestyles.

Myths and legends

Over the years, battery technology has moved forward but, unfortunately, some of the advice given on battery care has not. This has resulted in a number of confused and at times contradictory instructions on the 'best' way to care for your batteries. This section will help to dispel some of these myths and legends.

1. Batteries can be charged immediately after use. You do not need to allow them to cool prior to charging.
2. Mobility batteries do not develop a memory from using a repetitive charge and discharge cycle. This only applies to nickel cadmium batteries commonly found in products such as camcorders.
3. Batteries when new do not require any special attention with regard to their charge and discharge cycle. Following the relevant 'care plan' is the best advice we can give.

Transfer to and from the chair

Sunrise Medical recommend that you consult your healthcare professional for assistance in developing your personal front or side transfer technique to best suit your needs, and avoid any personal injury (Fig. 59 and 60).

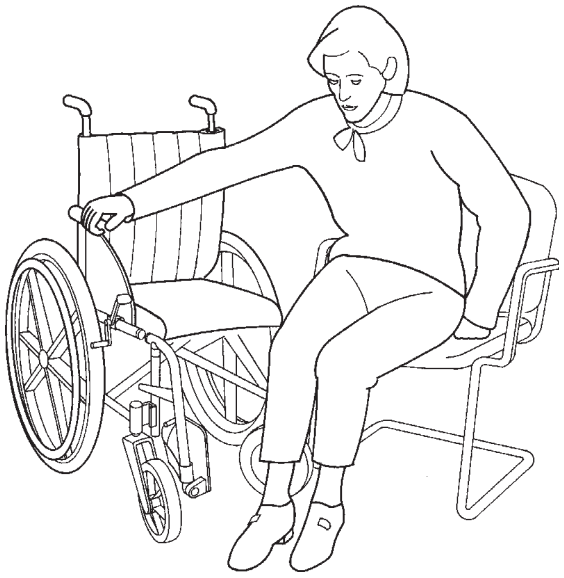


Fig. 59

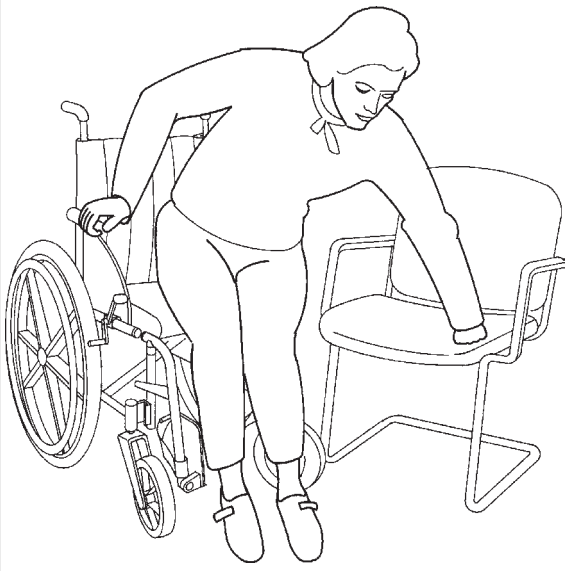


Fig. 60

Gradients: ascents

When going uphill, keep the chair moving. Keep the joystick pushed well forward and steer by moving it from side to side. If you have stopped on a hill, then you should start slowly, and if necessary lean forward to obviate the tendency for the front wheels to lift (Fig. 61).

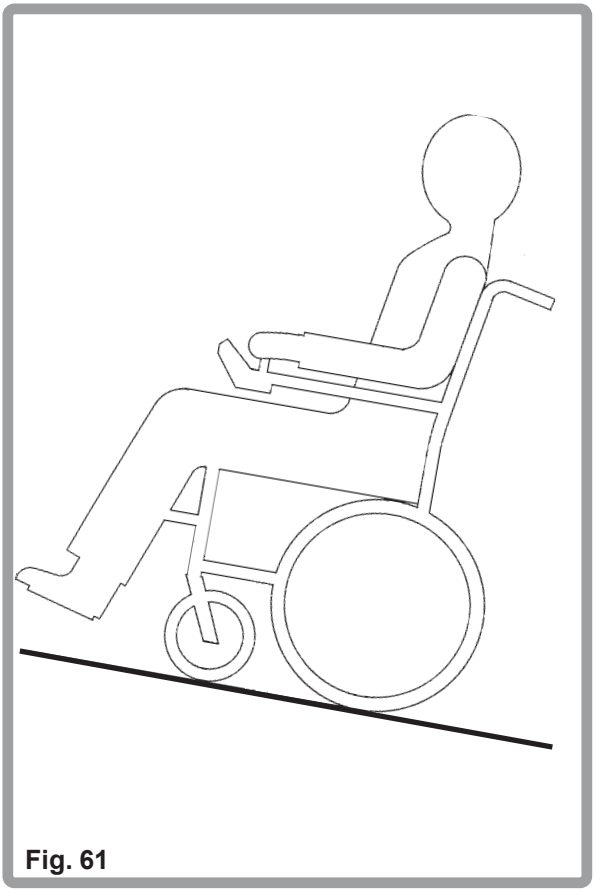


Fig. 61

Gradients: descents

On descents, it is important not to let the wheelchair accelerate beyond its normal level of ground speed. In fact, it is safer to proceed slowly down steep descents and stop immediately if any anxiety arises regarding directional control. If the chair picks up speed, centre the control to slow it or to stop all forward movement, then restart slowly and do not allow the speed to increase. The solid state controller has the benefit of a logic system, that will help compensate when driving along a camber or up a hill. This is an added safety feature on your wheelchair. In addition of course, you may control the wheelchair speed by using the speed control (Fig. 62).

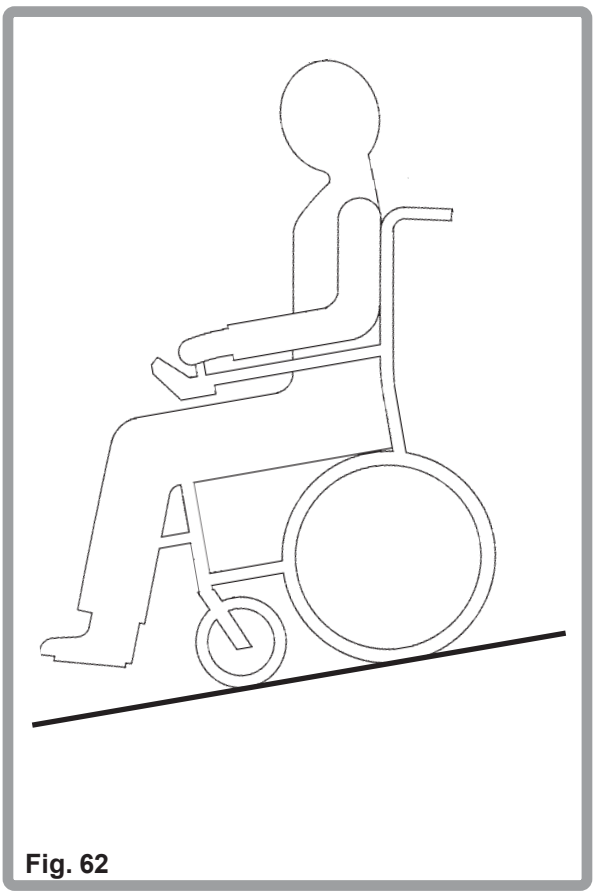


Fig. 62

Gradients: Seat riser option

Avoid dangerous driving situations when the riser is in a raised position, such as trying to overcome obstacles like kerbs or driving up or down gradients.

Maintenance and service history - Controllers

Daily Safety checks

With the control system switched off, check that the joystick is not bent or damaged and that it returns to the center when you push and release it. If there is a problem do not continue with the safety checks and contact your service agent.

Weekly Safety checks

Parking brake:

This test should be carried out on a level floor with at least one meter clearance around the chair.

Switch on the control system.

Check that the battery gauge remains on, or flashes slowly, after one second.

Push the joystick slowly forwards until you hear the parking brakes operate. The chair may start to move.

Immediately release the joystick. You must be able to hear each parking brake operate within a few seconds.

Repeat the test a further 3 times, pushing the joystick slowly backwards, left and right.

Connectors:

Make sure that all connectors are securely mated.

Cables:

Check the condition of all cables and connectors for damage.

Joystick gaiter:

Check the thin rubber gaiter or boot around the base of the joystick shaft for damage or splitting. Check visually only, do not handle the gaiter.

Mounting:

Make sure that all components of the control system are securely mounted. Do not overtighten any securing screws.

Maintenance and service history

Cleaning

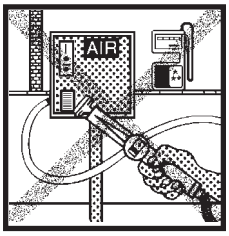
The wheelchair should be wiped over once per week with a slightly damp, not wet, cloth and any fluff or dust that has accumulated around the motors should be blown or dusted away.

Tyre pressures

It is important to regularly check the pneumatic tyres for signs of wear and air pressure.
The correct pressures are between the minimum of 122 kiloPascals, (18 psi, 1.22 bar) and maximum 172 kiloPascals (25 psi, 1.72 bar) for front wheels, and the minimum of 102 kiloPascals (15 psi, 1.02 bar) and the maximum 150 kiloPascals (22 psi,1.5 bar) for rear wheels.
The pressure will need to vary, depending on the weight of the user. IT IS IMPORTANT that front wheels are inflated to the same pressure as a pair, and likewise the rear. The inflator pump provides the safest method of inflating your wheelchair tyres and the pressure can be checked with a standard motor vehicle pressure gauge.

⚠ WARNING

Do not inflate beyond the maximum tyre pressure.



PLEASE NOTE - NEVER INFLATE TYRES USING GARAGE FORECOURT AIRLINE, ALWAYS USE THE PUMP PROVIDED

Electrical connections

When inspecting electrical connections, pay attention to the battery connections, the connection of batteries to power loom and plug in sockets for the joystick, control box and lights and indicators.

Tyre wear

When inspecting the tyres for signs of wear, look for significant scuff marks, cuts and a diminished tyre tread. Tyres will need to be changed when the tread cannot be seen over the complete surface of the tyre.

Upholstery/seating

Tears, dents, wearing or slackening of upholstery particularly near to metal could result in poor posture or lower levels of comfort and pressure relief.

Authorised Sunrise Medical service agents

The annual full service must be performed by an approved Sunrise Medical Service Agent. For a list of approved service agents in your area please contact Sunrise Medical on this telephone number:
01384 44 66 88

Storage

When storing your powerchair for long periods of time (in excess of one week), first fully charge and then disconnect the batteries to minimise battery discharge.

Maintenance and service history

F55 maintenance and routine inspection	DAILY	WEEKLY	MONTHLY	QUARTERLY	SIX MONTHLY	ANNUALLY
Charge batteries	●					
Check battery level indicator	●					
Check joystick is not bent or damaged	●					
Ensure all removable parts are securely fastened	●					
Parking brake test		●				
Ensure all electrical connections are made, and firm		●				
Ensure all cables are sound		●				
Ensure joystick boot is not torn or damaged		●				
Wipe vehicle with a damp cloth		●				
Inspect the riser option once a month to make sure the automatic speed reduction is working properly. Notify your authorised dealership immediately if it is not working properly.			●			
Check tyre pressures		●				
Ensure lights and indicators are operational and clean		●				
Check tyres for wear			●			
Battery terminals inspection. Clean and protect with petroleum jelly. SAFETY MUST BE OBSERVED!				●		
Check condition of upholstery and seating					●	
Complete inspection, safety check and service should be made by an authorised Sunrise Medical supplier						●

To order spare parts

PLEASE QUOTE THE FOLLOWING:

1. Model of chair
2. Serial number of chair
3. Left hand or right hand control
4. Part number and description and quantity of items required
5. State colour when ordering upholstery or frame parts.

Service history

This section is designed to assist you in keeping a record of any service and repairs to your wheelchair. Should you decide to sell or exchange your vehicle in the future, this will prove most helpful to you. Your Service Agent will also benefit from a documented record and this manual should accompany the wheelchair when service or repair work is carried out. The Service Agent will complete this section and return the manual to you.

Customer Name _____

Address _____

_____

Postcode _____

Date chair purchased _____

Model _____

Colour _____

Serial No. _____

YEAR	1	2	3	4
Service dates				
Controller				
On/off switch				
Output plug				
Operation				
Dynamic braking				
Programmable settings				
Batteries				
Levels				
Connections				
Discharge test				
Wheels/tyres				
Wear				
Pressure				
Bearings				
Wheel nuts				
Motors				
Wiring				
Noise				
Connections				
Brake				
Brushes				
Chassis				
Condition				
Steering				

YEAR	1	2	3	4
Service dates				
Upholstery				
Seat				
Back				
Armrests				
Electrics				
Condition of loom				
Connections				
Lights (where fitted)				
Test run				
Forwards				
Reverse				
Emergency stop				
Left turn				
Right turn				
Up/down slope				
Over obstacle				
Parking brake (where fitted)				
List items repaired/adjusted				

Dealer stamp

Date: Signed:

Dealer stamp

Date: Signed:

Dealer stamp

Date: Signed:

Dealer stamp

Date: Signed:

Transportation of the vehicle

Clamp points

The standard version of the F55 has been crash tested to ISO 7176 Part 19. However we do not recommend that you transport the F55 in a vehicle.

Should you still choose to transport the F55 please clamp the product using a 4 point Webbing Restraint with 4 rear straps and 2 front straps (Fig. 63 and 64).

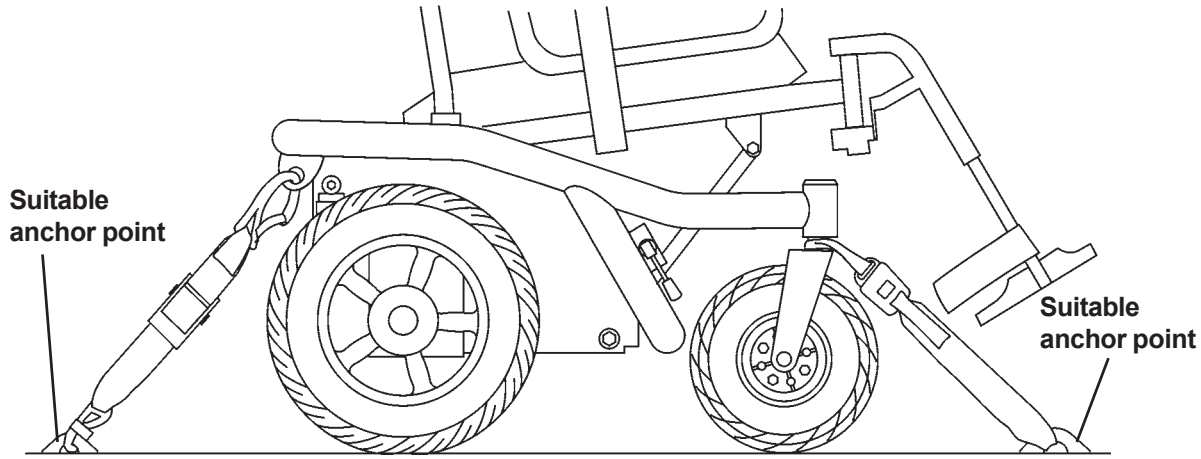


Fig. 63

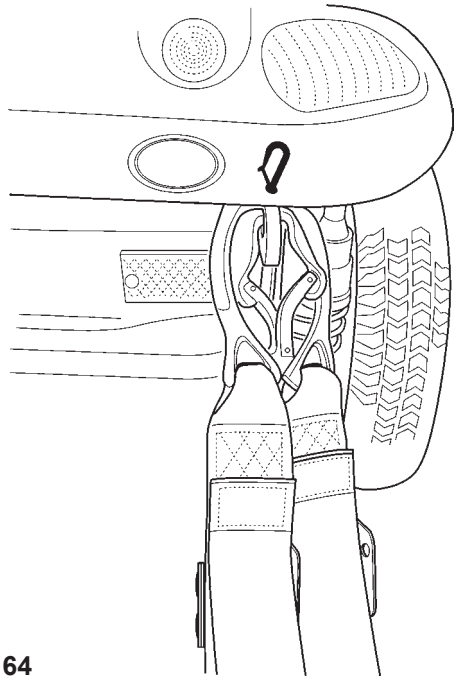


Fig. 64

Transportation of the vehicle

Transportation in vehicles

This wheelchair has been crash tested in its standard configuration. However, due to safety risks Sunrise Medical do not recommend the transportation of people in their wheelchairs.

Should a person need to be transported in the wheelchair on transport systems, the following should be adhered to:

1. The wheelchair must be positioned forward facing.

2. For tie down points on the wheelchair, please look for the tie-down symbols on the wheelchair.

3. A head restraint must be fitted and suitably positioned at all times during the transportation.

4. If possible, remove seat cushion to create a lower centre of gravity.

5. The chair is crash-tested, and has satisfied the Dynamic test requirements of ISO 7176-19.

6. The wheelchair must be secured by a 4-point Tie Down Restraint system, conforming to ISO 10542 part 2.

7. The occupant must be restrained independently of the wheelchair by a lap and diagonal safety belt, conforming to ISO 10542 part 3.Sunrise Medical postural lap belts are for postural support only, and not suitable as restraints during transportation.

8. Any detachable accessories or components of the wheelchair must be removed and stored securely in the vehicle luggage compartment during transportation.

9. The Tie down restraints should be fitted to the main frame of the wheelchair as indicated by the karabiner stickers, and in the User Manual, and not to any other part of the chair.

10. The Tie Down restraints should be attached as close as possible at an angle of 45°, and tightened securely in accordance with the restraint manufacturers' instructions.

11. The wheelchair parking brakes must be firmly applied.

Lap belt instructions

Note:
Lap belts are fitted as positional aids, and are not suitable as transportation restraints

Step 1

Place lap belt round chair.

Step 2

Seat lift Power/Manual recline back Position adjustment blocks to user's requirements

Step 3

Position belt such that fastening buckle is situated in the middle of the stomach. The positioning belt should be adjusted so that a hand can be placed between the user and the belt.

Lap belt instructions

Step 4

Attach bottom universal bracket (with slot facing downwards) to back posts of wheelchair. Wrap the metal strap around the back post. Place a washer on the securing screw, and insert the screw through the appropriate hole in the strap. For ϕ1" tube use outer hole, for ϕ7/8" tube, use inner hole.
Tighten the screw into the barrel nut through the side of the post bracket body. Snap the screw caps over both screw heads.

Thread the positioning belt back through the tri-glide to form a loop around the back post. Thread positioning strap through tri-glide. Thread lap belt under universal bottom bracket.

Recaro

Step 1

Use 50mm Aircraft buckle lap strap
.

Lap belt instructions

The lap strap fitted for a right-handed user.

The Lap strap fitted for a left-handed user.

Place the strap loosely across the seat with the opening end of the buckle facing to the right for a left-handed person and to the left for a right-handed person. Pass the bolt through the plain washer and strap bracket. Place saddle washer on bolt.

Pass the bolt through seat frame. Place other saddle washer on the end of the bolt and against frame. Fit plain washer and nut.

Lap belt instructions

Step 2

Position belt such that fastening buckle is situated in the middle of the stomach. The positioning belt should be adjusted so that a hand can be placed between the user and the belt.

Notes:

1. Standard Sling - Lap belt movement is restricted by upholstery.

2.Contoured back - Use universal bottom bracket as per recline back method.

Maintenance:

Check lap belt, and securing components, at regular intervals for any sign of frays, or damage. Replace if necessary.

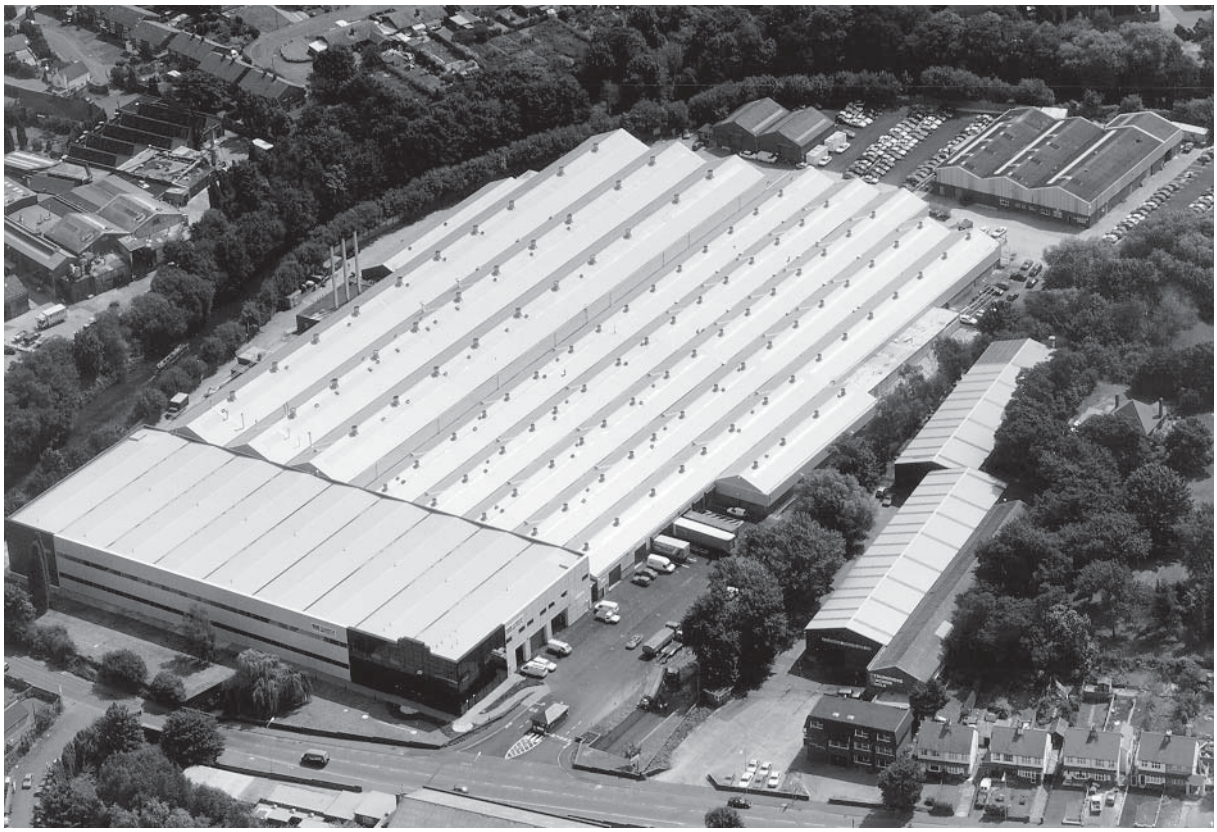
Technical data

Item	Minimum	Maximum
Overall length with legrest		1100 mm
Overall width		640 mm
Total mass (depending on options fitted)		110 kg
Mass of heaviest part		80 kg
Load (with seat riser option)		127 kg (100 kg)
Seat riser option adjustment (Max. speed 25% when seat is in raised position)		approx. 30 cm
Obstacle climbing (without kerb climber) (with kerb climber)		52 mm 112 mm
Forward speed	6 km/h	(10 km/h optional)
Braking distance from maximum speed		870 mm
Seat plane angle	8°	
Effective seat depth with standard seat (with seat riser option via backrest and additional depth adjustment via legrests)	410 mm (460 mm)	510 mm (510 mm)
Effective seat width (with seat riser option)	450 mm (360 mm)	500 mm
Seat surface height at front edge	425 mm	510 mm
Backrest angle	0°	40°
Backrest height		520 mm
Footrest to seat distance	340 mm	410 mm
Leg to seat surface angle		240°
Armrest to seat distance	180 mm	245 mm
Front location of armrest structure	180 mm	200 mm
Turning circle	1300 mm	

Sunrise Medical

Your new wheelchair is manufactured in the West Midlands by Sunrise Medical. With over 30 years experience, we are one of the longest established mobility equipment manufacturers in the UK. All our Scooters, Wheelchairs and Powerchairs undergo rigorous tests to ensure that they meet our requirements of comfort, safety and durability. Our success is based on the strong traditions of quality, value for money and genuinely caring for our customers.

We pride ourselves not only on designing and building the most innovative products but also on our commitment to offer an excellent standard of customer service both during and after sale.



In addition to your new wheelchair, Sunrise also manufacture oxygen concentrators, nebulizers and hoists. We have a vast range of aids for daily living which include bathing and bed accessories through to walking sticks.

Should you require any information on our full range of products please call us on 01384 44 66 88 or write to us at:

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West Midlands DY8 4PS
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